May 8, 2002

D.T.E. 01-31-Phase I

Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Regulatory Plan to succeed Price Cap Regulation for Verizon New England, Inc. d/b/a Verizon Massachusetts' intrastate retail telecommunications services in the Commonwealth of Massachusetts

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APPEARANCES: Bruce P. Beausejour, Esq.
Victor D. Del Vecchio
Verizon Massachusetts
185 Franklin Street, Room 1403
Boston, MA 02110

-and-

Robert N. Werlin
Keegan, Werlin & Pabian, LLP
21 Customs House Street
Boston, MA 02110
FOR: VERIZON NEW ENGLAND, INC. D/B/A VERIZON MASSACHUSETTS
Petitioner

Thomas Reilly, Attorney General
By: Karlen J. Reed
Joseph W. Rogers
Wilner Borgella, Jr.
Assistant Attorneys General
Regulated Industries Division
Office of the Attorney General
200 Portland Street, 4th Floor
Boston, MA 02114
Intervenor

Eric J. Branfman
Philip J. Macres
Swidler Berlin Shereff Friedman, LLP
3000 K Street, NW
Washington, DC 20007
FOR: NETWORK PLUS, INC.
Intervenor

Cameron Kerry
Scott Samuels
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
One Financial Center
Boston, MA 02111

-and-

William Rooney
General Counsel
Global NAPs, Inc.
89 Access Road, Suite B
Norwood, MA 02062
FOR: GLOBAL NAPS, INC.
Intervenor

Paul C. Besozzi
Patton Boggs, LLP
2550 M Street, N.W.
Washington, DC 20037

-and-

George Niden, President
New England Public Communications Council, Inc.
103 Mechanic Street, Bay E
Marlboro, MA 01752
FOR: NEW ENGLAND PUBLIC COMMUNICATIONS COUNCIL, INC.
Intervenor

Jeffrey F. Jones, Esq.
Kenneth W. Salinger, Esq.
Jay E. Gruber, Esq.
Palmer & Dodge, LLP
One Beacon Street
Boston, MA 02108-3190

-and-

Robert Aurigema, Esq.
AT&T Communications, Inc.
32 Avenue of the Americas - Room 2700
New York, NY 10013

-and-

Dr. Patricia Jacobs
AT&T Communications of New England, Inc.
99 Bedford Street
Boston, MA 02111

FOR: AT&T COMMUNICATIONS OF NEW ENGLAND, INC.
<u>Intervenor</u>

Christopher J. McDonald, Esq.
Senior Attorney, Public Policy, Northern Region
WorldCom, Inc.
200 Park Avenue
New York, NY 10166

FOR: WORLDCOM, INC.
<u>Intervenor</u>

William W. Durand, Esq.
New England Cable TV Association
100 Grandview Road, Suite 310
Braintree, MA 02184

FOR: NEW ENGLAND CABLE TELEVISION ASSOCIATION
<u>Intervenor</u>

Craig Dingwall
Sprint Communications Company, L.P.
401 9th Street, N.W., Suite 400
Washington, D.C. 20004
FOR: SPRINT COMMUNICATIONS COMPANY, L.P.
Intervenor

Eric J. Krathwohl, Esq.
Rich, May, Bilodeau & Flaherty, P.C.
176 Federal Street, 6th Floor
Boston, MA 02110-2223

-and-

Andrew O. Isar
Miller & Isar
7901 Skansie Avenue, Suite 240
Gig Harbor, WA 98335
FOR: THE ASSOCIATION OF COMMUNICATIONS ENTERPRISES
Intervenor

Thomas W. Snyder
Qwest Services Corporation
1801 California Street
Denver, CO 80202
FOR: QWEST COMMUNICATIONS CORPORATION
Intervenor

Thomas P. O'Neill
Boston Gas Company d/b/a KeySpan Energy Delivery New England
One Beacon Street
Boston, MA 02108
FOR: BOSTON GAS COMPANY D/B/A KEYSPAN ENERGY DELIVERY NEW ENGLAND
Limited Participant

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SYLLABUS[1]
D.T.E. 01-31-Phase I

The Massachusetts Department of Telecommunications and Energy ("Department") again has endorsed competitive markets over regulation as the best way to achieve economic efficiency, technological innovations, and a greater sensitivity to customer demands. Building upon the regulatory framework the Department put in place to encourage the development of competitive telecommunications markets in Massachusetts after the break-up of AT&T in 1984, the Department concluded: (1) that market forces, already at work and likely to strengthen, are sufficient to permit Verizon market-based pricing flexibility for its retail, business services; and (2) that such permission is consistent with the Department's statutory mandate to ensure that rates for telecommunications services in Massachusetts remain "just and reasonable." The Department's actions are consistent both with its own existing precedent and with the actions of other states, such as New York, which has recently embarked upon a similar market-based approach to the regulation of retail telecommunications services, as well as consistent with market power concepts embodied in the United States Department of Justice's Horizontal Merger Guidelines. The action taken here is an outgrowth of policies and precedents of nearly two decades' standing.

In 1985, the Department classified both AT&T and New England Telephone (now Verizon) as dominant carriers with market power, subject to traditional ratemaking standards for ensuring that prices are just and reasonable. All other carriers have been classified as nondominant, a classification that means that market forces are sufficient to ensure that their rates are just and reasonable. Over the years, the Department has allowed AT&T and Verizon to reclassify *some* services as "sufficiently competitive" to warrant the same treatment for those particular services as applied to services of nondominant carriers. And in 1996, the Department reclassified AT&T as a nondominant carrier for all services it offers. The Department's goal in the past seventeen years has been to evolve regulatory requirements and oversight to match the evolution of market forces, in order to more closely match the level of regulation to the degree of market power. This Order is another step in the evolutionary process that was started in 1985.

The Federal Telecommunications Act of 1996 has accelerated the pace and degree of market entry in Massachusetts by carriers who compete with Verizon. Though there is competition in all areas of the state for residential and business customers, the primary focus of competition today is for business customers. Relying on the traditional three-pronged market power analysis of competitive local exchange carrier ("CLEC") supply elasticity,

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[1] This epitome has the same function and status as described in United States v. Detroit Timber & Lumber Co., 200 U.S. 321 (1906), and Burbank v. Ernst, 232 U.S. 162 (1914).

market share, and demand elasticity (see D.P.U. 91-79, at 32 (1992)), the Department has found that Verizon successfully demonstrated the existence of "sufficient competition" for most of its retail business services. Consistent with Department precedent, a finding of "sufficient competition" for a telecommunications service permits the Department to allow pricing flexibility for that service. Therefore, the Department granted Verizon's request for pricing flexibility for those retail business services that are available on a wholesale basis as unbundled network elements ("UNEs," see 47 U.S.C. § 251(c)(3)).

The Department concluded, however, that downward pricing flexibility for Verizon's retail business services would enable Verizon to engage in a "price squeeze" with respect to UNE-based CLECs. Consequently, the Department implemented an enhanced price floor for Verizon's retail business services, equal to the density-zone specific UNE rates for the elements that make up the service, plus a mark-up for Verizon's retailing costs as reflected in the wholesale discount. Verizon will be required to file a cost study analysis calculating the price floor for the retail business services for which Verizon seeks an initial price decrease. In terms of Verizon's residential service, which will remain as a regulated, dominant carrier offering, the Department has tentatively concluded that it should require that prices be set between a range of incremental cost as a floor and stand-alone cost as a ceiling. Wholesale services, such as unbundled network elements, interconnection, and resale, will continue to be regulated as monopoly services, pursuant to the requirements of the Telecommunications Act of 1996.

The Department concludes that the new regulatory framework that will result from this and subsequent orders in this docket will accomplish the complementary goals of promoting competition, ensuring that customers face just and reasonable prices, and maintaining a high level of service quality.

I. INTRODUCTION

A. Verizon's Petition

On February 27, 2001, after Verizon made its sixth annual price cap filing, the Department directed Verizon to file a proposal for further Department regulation of its retail telecommunications services in Massachusetts. On April 12, 2001, Verizon filed with the Department its proposed Alternative Regulation Plan ("Plan"). The Plan would cap residential dial-tone and local usage rates for three years, with the pricing of all other residential services restricted by revenue-neutral filings. All other services, with the exception of access services, would be subject to market-based pricing.

The Department held four public hearings on April 26, May 1, May 4, and May 9, 2001, in Plymouth, Worcester, Boston, and Pittsfield, respectively, in order to afford interested persons an opportunity to comment on Verizon's proposed Plan. Four days of evidentiary hearings were held at the Department's offices between December17, 2001, and January 3, 2002.

B. Participating Parties

Verizon was the petitioner. Pursuant to G.L. c. 12, § 11E, the Attorney General of the Commonwealth ("Attorney General") filed a notice of intervention in the proceeding. In addition, AT&T Communications of New England, Inc. ("AT&T"); Allegiance Telecom of Massachusetts, Inc. ("Allegiance"); Network Plus, Inc. ("Network Plus"); Global NAPS, Inc. ("GNAPS"); New England Public Communications Council ("NEPCC"); WorldCom, Inc. ("WorldCom"); New England Cable Television Association ("NECTA"); Sprint Communications Company, L.P. ("Sprint"); Association of Communications Enterprises ("ASCENT"); and Qwest Communications Corporation ("Qwest") were granted intervenor status in the proceeding. Boston Gas Company d/b/a KeySpan Energy Delivery New England ("KeySpan") was granted limited participant status.

In addition to Verizon, AT&T, the Attorney General, and Network Plus sponsored witness testimony and presented other evidence.

C. Interlocutory Orders

Between April 2001, when Verizon initially filed its Plan with the Department, and May 2002, the Department issued three interlocutory Orders. In those Orders, the Department made the following rulings:

- Verizon's April 12, 2001 Plan, in effect, requested classification of a large portion of its services as sufficiently competitive to permit market-based pricing of such services. Verizon proposed an alternative to traditional cost-of-service or indexed price cap regulation for the remaining services.

- The appropriate regulatory framework for Verizon's retail services would be dependent upon how the Department responded to a showing by Verizon of sufficient competition.

- The proceeding would be bifurcated into two phases, the first phase of which would consist of an investigation into the levels of competition, the specific standard of review, and the necessary Department findings regarding sufficient competition. If Verizon met its burden of proof to show that the services for which it proposed pricing flexibility were sufficiently competitive, the second phase would consist of an investigation into the appropriateness of Verizon's proposed Plan as further expressed in a compliance filing.

- At the start of the second phase, the Department would address whether the additional categories that the parties argued should be included in the scope (e.g., universal service funding, price floors, access reform) need to be included in the second phase of the proceeding.

- Wholesale provisioning issues, including special access provisioning, were outside the scope of the proceeding.

II. VERIZON'S PLAN

A. Treatment of Residential Services

In its Plan, Verizon proposes to eliminate Touch Tone service charges in Massachusetts on a revenue-neutral basis, a move that will increase the Residence Dial Tone Line rate from $9.91 per month to $10.38 per month. Verizon then proposes to cap basic dial-tone and local usage rates for three years. In addition to the cap, Verizon proposes that it be permitted the flexibility to choose to reduce basic residential rates in specific areas of the state during the three-year cap at its discretion. After three years, any increase in the basic residential service cap would require Department approval. The pricing of all other residential services (i.e., non-basic residential services) would be restricted by revenue neutral filings; however, Verizon proposes that it have the discretion to raise or lower rates in specific geographic areas.

B. Treatment of Business Services

Verizon proposes full market-based pricing flexibility for all of its retail services to business customers. Verizon further proposes that it have the ability to raise or lower prices for individual business services in specific areas, as opposed to state-wide pricing.

C. Treatment of Other Services

According to Verizon's proposal, pricing for certain Verizon services, such as pole and conduit charges and late payment charges, that are governed by requirements developed in separate Department proceedings, would not be subject to pricing flexibility. In addition, Verizon proposes that for all new non-residential products and services (which can include new combinations of existing services), it be granted full market-based pricing flexibility and the ability to offer these new services only in specific geographic areas.

D. Service Quality and Intrastate Access Charge Reform

Verizon's Plan proposes to continue the Service Quality Plan developed in D.P.U. 94-50, as well as provisions for access charge reform; however, in the June 21 Interlocutory Order, the Department determined to postpone review of these provisions until the conclusion of the Department's investigation in Phase I.

III. SUFFICIENT COMPETITION

A showing of "sufficient competition" depends on the analysis of three factors: supply elasticity, demand elasticity, and market share. The Department found that Verizon has satisfied all three factors, and has thus successfully made a showing of sufficient competition to support market-based pricing for Verizon's retail business services.

A. Relevant Product and Geographic Market

Before a service can be classified as sufficiently competitive, the relevant product and geographic markets in which the service competes must be defined. The Department determined that the residential and business services compete in different markets, but found that Verizon's retail, business services constitute one product market, and that all the central offices in Massachusetts constitute one geographic market.

B. Supply Elasticity

Supply elasticity is the ability of firms to change their production of a good or service in response to a change in price of that good or service. Of the three components examined in a market power study, supply elasticity of the competing firms is the most significant because, despite a high market share and a low market demand elasticity, a high supply elasticity can eliminate market power. The Department concluded that, with very few exceptions, CLEC supply elasticity is high, and the market is contestable. High supply elasticity will enable suppliers to discipline one another's conduct, and the resultant market behavior among competitors will protect buyers from market power abuse.

As part of its Plan, Verizon sought pricing flexibility for analog and digital private line services, which are the retail analog to wholesale special access service.[2] The Department found that special access pricing acts as a barrier to CLECs who want to compete against Verizon's retail analog and digital private line services, and that the market for private line services is not contestable. Therefore, the Department will grant pricing flexibility to Verizon for its digital and analog private line services only after Verizon's special access services are priced at UNE levels. Also, the Department declined to grant pricing flexibility to Verizon's retail business services that are not contestable on a UNE basis and to those Verizon services that the Department concluded are primarily wholesale services, such as PAL, PASL, and collocation.[3]

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2 Special access is a dedicated line from an end-user to a long distance company.

3 Verizon provides Public Access Lines ("PAL") and Public Access Smart Lines ("PASL") to competing providers of payphone service. Collocation occurs when a CLEC locates its equipment within a Verizon central office.

In terms of supply elasticity, it is necessary that UNEs be priced on the basis of forward-looking costs. Whether forward-looking costs for UNEs are based on total element long-run incremental costs ("TELRIC") or some other forward-looking cost methodology is not significant. Therefore, the Department's conclusions about supply elasticity will not change even if the United States Supreme Court upholds the decision of the United States Court of Appeals for the Eighth Circuit ("Eighth Circuit Court") prohibiting TELRIC because the Eighth Circuit Court did affirm that UNEs could be based on forward-looking costs. See Iowa Utils. Board v. FCC, 291 F.3d 744, 751-753 (2000), cert. granted 531 U.S. 1124 (2001).

C. Market Share

The market share of a regulated enterprise presents the shape of the market at a specific point in time, and is often a reflection of prior regulatory policies. The Department found that while Verizon's market share for business services is large, significant CLEC entry and expansion into the business market has occurred, and also found that Verizon's market share has continued to decrease even during a period of significant turmoil in the telecommunications industry. Having determined that the supply elasticity of competing firms in Massachusetts is high, the Department placed less weight on market share as an indicator of market power in its evaluation of sufficient competition. Because of the ease of entry in the Massachusetts business market, actual competition, as reflected in market share data, is not as important as potential competition to constrain Verizon's prices. Department precedent establishes that a high degree of supply elasticity lessens the importance of market share. See D.P.U. 91-79, at 32 (1992).

D. Demand Elasticity

Demand elasticity refers to the willingness and ability of a consumer to change the quantity of a good consumed in response to a change in the price of that good. In general, the demand elasticity of a good is directly related to the availability of adequate substitutes.

The Department found that the number of Verizon's retail business lines has been declining while competitive business lines have been increasing, a trend and resultant condition, which, given the relative inelastic demand for basic local exchange services, indicate that business customers are willing to purchase and have purchased local exchange services from Verizon's competitors. Thus, the Department concluded that the demand for Verizon's own business services is sufficiently elastic, despite its position as the incumbent.

IV. RESIDENTIAL SERVICES

The Department found that some form of alternative regulation (e.g., rate freeze, price cap, revenue cap, or some combination of these) would be appropriate for Verizon's residential services. For basic residential services, the Department tentatively concluded that the Department should allow pricing flexibility within a range encompassing a floor of incremental cost and a ceiling of stand-alone cost. In order to promote our ratemaking goal of continuity, however, the Department tentatively concluded that any price increases for residential services should be limited to five percent per year, a rate increase which is less than the percentage price increases approved by the Department in the rate-rebalancing process started with D.P.U. 89-300 (1990).

V. PHASE II

The Department directed Verizon to submit to the Department a plan for regulatory treatment of its retail services that is consistent with the requirements set forth in the Order, specifically including the following:

- a proposal for regulating basic residential services (if Verizon's proposal is not consistent with the Department's tentative conclusions in the Order, the filing must include thorough and detailed explanation and justification for the departure);

- a calculation of new prices for switched and special access services, and the new residential dial-tone price that would result from revenue-neutral reductions in access prices (Verizon should include a calculation of revenue-neutrality using specified demand-stimulation assumptions);

- a description of the Service Quality plan and associated penalties;

- a description of filing requirements for price decreases for business services; and

- identification of any services that are primarily provided to other carriers as wholesale services, and a proposal for a pricing regime based on UNE requirements for any such services.

TABLE OF ABBREVIATIONS

AG	Attorney General of the Commonwealth of Massachusetts
ASCENT	Association of Communications Enterprises
AT&T	AT&T Communications of New England, Inc.
CLEC	Competitive Local Exchange Carrier
CO	Central Office
Department or DTE	Massachusetts Department of Telecommunications and Energy
DID	Direct Inward Dialing
DOJ	United States Department of Justice
DPU	Massachusetts Department of Public Utilities, now DTE
E911	Enhanced 911
EEL	Enhanced Extended Link
Exh.	Exhibit
FCC	Federal Communications Commission
GNAPs	Global NAPs, Inc.
HHI	Herfindahl-Hirschman Index
ILEC	Incumbent Local Exchange Carrier
LATA	Local Access and Transport Area
MCP	Massachusetts Competitive Profile
NECTA	New England Cable Television Association
NEPCC	New England Public Communications Council
NET or NYNEX	New England Telephone and Telegraph Co. d/b/a NYNEX

PAL	Public Access Line
PASL	Public Access Smart Line
PAP	Performance Assurance Plan
PBX	Private Branch Exchange
ROR	Rate of Return
RFP	Request For Proposals
RR	Record Request
TELRIC	Total Element Long-Run Incremental Cost
Tr.	Transcript
UNE	Unbundled Network Element
UNE-L	UNE-loop
UNE-P	UNE-platform
Verizon or VZ	Verizon New England, Inc. d/b/a Verizon Massachusetts

I. INTRODUCTION

Since 1985, the Department has consistently promoted the development of efficient competition in all telecommunications markets in Massachusetts. Over time, the Department has used a variety of methods to regulate the rates of carriers deemed to have market power[4] for certain services, in order to promote competition and ensure that rates for telecommunications services remain just and reasonable (see Section IV, below, for an overview of Department regulatory history). In this Order, we investigate whether, as a result of the Telecommunications Act of 1996[5] and other market changes, there is sufficient competition in Massachusetts to permit the new regulatory framework proposed by the incumbent provider, Verizon New England, Inc. d/b/a Verizon Massachusetts ("Verizon").

In 1995, the Department approved a petition by NYNEX (now Verizon) to replace traditional rate of return regulation of its retail rates and profits with an alternative form of regulation called a price cap. Petition of New England Telephone and Telegraph Company d/b/a NYNEX for an Alternative Regulation Plan for the Company's Massachusetts Intrastate Telecommunications Services, D.P.U. 94-50 (1995) ("Price Cap Order"). The term of the price cap plan approved in D.P.U. 94-50 was six years, so the Department determined to initiate a review of the regulatory plan adopted in D.P.U. 94-50 after six annual price cap

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4 The Department has previously stated that a firm with market power has the ability to raise the price of its product or service, and to sustain this price increase over a period of time, without losing so many sales that the price increase is not profitable. AT&T Alternative Regulation, D.P.U. 91-79, at 31 n.19 (1992).

5 Pub. L. No. 104-104, 110 Stat. 56 (1996), codified at 47 U.S.C. §§ 151 et seq. ("the Telecommunications Act" or "the Act").

filings. Id. at 272-273. On February 27, 2001, after Verizon made its sixth annual filing, the Department directed Verizon to file a proposal for further Department regulation of its retail telecommunications services in Massachusetts.[6] On April 12, 2001, Verizon filed with the Department its proposed Alternative Regulation Plan ("Plan") (see Section III, below, for further discussion of the Verizon's proposed Plan). The Department's investigation of the Plan was docketed as D.T.E. 01-31.

Pursuant to notice duly issued, four public hearings were held on April 26, May 1, May 4, and May 9, 2001, in Plymouth, Worcester, Boston, and Pittsfield, respectively, in order to afford interested persons an opportunity to comment on Verizon's proposed Plan. Four days of evidentiary hearings were held at the Department's offices between December 17, 2001, and January 3, 2002. Pursuant to G.L. c. 12, § 11E, the Attorney General of the Commonwealth ("Attorney General") filed a notice of intervention in the proceeding. In addition, AT&T Communications of New England, Inc. ("AT&T"); Allegiance Telecom of Massachusetts, Inc. ("Allegiance");[7] Network Plus, Inc. ("Network Plus");[8] Global NAPS, Inc. ("GNAPS"); New

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6 Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Regulatory Plan to Succeed Price Cap Regulation for Verizon New England, Inc. d/b/a Verizon Massachusetts' Intrastate Retail Telecommunications Services in the Commonwealth of Massachusetts, D.T.E. 01-31, at 2, Vote and Order to Open Investigation (February 27, 2001). The Department directed Verizon to file a proposal that included, at a minimum, a component for regulating or deregulating retail prices, regulating service quality, and intrastate access charge reform. Id.

7 On August 29, 2001, Allegiance filed a Notice of Withdrawal indicting its intention to no longer be involved or participate in the proceeding.

8 On February 12, 2002, Network Plus indicated to the Department that it would not be submitting briefs in this proceeding due to the commencement of its Chapter 11

(continued…)

England Public Communications Council ("NEPCC"); WorldCom, Inc. ("WorldCom"); New England Cable Television Association ("NECTA"); Sprint Communications Company, L.P. ("Sprint"); Association of Communications Enterprises ("ASCENT"); and Qwest Communications Corporation ("Qwest") were granted intervenor status in the proceeding. Boston Gas Company d/b/a KeySpan Energy Delivery New England ("KeySpan") was granted limited participant status.

Verizon presented the testimony of Dr. William E. Taylor, Senior Vice President, National Economic Research Associates, Inc.; Michael J. Doane, President, PM Industrial Economics; and John Conroy, Vice President–Regulatory, Verizon Massachusetts. The Attorney General sponsored the testimony of Dr. Lee L. Selwyn, President, Economics and Technology, Inc. AT&T sponsored the testimony of Dr. John W. Mayo, Professor of Economics, Business and Public Policy at Georgetown University; Deborah S. Waldbaum, Senior Attorney in AT&T's Law and Government Affairs Unit; and Anthony Fea, District Manager, AT&T's Local Network Services Unit. Network Plus presented the testimony of Dr. August H. Ankum, Senior Vice President, QSI Consulting, Inc.

The evidentiary record consists of 306 exhibits. Verizon entered twelve exhibits, the Attorney General entered 23 exhibits, AT&T entered ten exhibits, and Network Plus entered seven exhibits. The parties jointly sponsored as individual exhibits the 254 information request responses in the proceeding. The Department agreed to incorporate by reference the Year

[8](…continued)
bankruptcy proceeding.

2000 Annual Telephone Returns filed with the Department; Verizon's Price Cap Compliance Filings from 1995-2000; and Verizon's Carrier to Carrier Guidelines Performance Standards and Reports from January-November 2001. The record also includes Verizon's responses to three record requests, two posed by the Attorney General and one posed by the Department; Network Plus's response to one record request posed by the Department; and AT&T's response to one record request posed by the Attorney General.

Initial briefs were filed by Verizon, the Attorney General, AT&T, and NEPCC. Reply briefs were filed by Verizon, the Attorney General, and AT&T.

II. PROCEDURAL HISTORY

The Department has issued three interlocutory Orders during the course of this proceeding. In addition, there is one appeal of a Hearing Officer ruling pending at this time.

A. Interlocutory Orders

1. June 21 Interlocutory Order

Pursuant to a schedule established at the first procedural conference, Network Plus, WorldCom, AT&T, the Attorney General, and Verizon filed comments in May 2001 regarding the scope of this proceeding. On June 21, 2001, the Department issued its Interlocutory Order on Scope. Verizon, D.T.E. 01-31, Interlocutory Order on Scope (June 21, 2001) ("June 21 Interlocutory Order"). The Department summarized the parties' comments as requesting that the Department include in the scope of the proceeding the following eight broad categories: (1) a full rate case or an extensive review of Verizon's past and projected financial information; (2) establishment of imputation-based price floors; (3) coordination of the relationship between wholesale and retail rates and the respective ongoing Department proceedings; (4) development of a universal service funding mechanism; (5) access pricing reform; (6) expansion of competitive safeguards; (7) review of alternative proposals to Verizon's Plan; and (8) an investigation into the state of competition in Massachusetts. June 21 Interlocutory Order at 12.

The Department concluded that, in Verizon's proposed Plan, Verizon was, in effect, requesting classification of a large portion of its services as sufficiently competitive to permit market-based pricing of such services, and was proposing an alternative to traditional cost-of-service or indexed price cap regulation for the remaining services. Id. at 16. As such, the Department found that the appropriate regulatory framework for Verizon's retail services would be dependent upon how the Department responded to a showing by Verizon of sufficient competition. Id. Therefore, the Department bifurcated the proceeding, the first phase of which would consist of an investigation into the levels of competition, the specific standard of review, and the necessary Department findings regarding sufficient competition. Id. at 17. The Department determined that if Verizon met its burden of proof to show that the services for which it proposed pricing flexibility were sufficiently competitive, the second phase would consist of determining whether Verizon's proposed Plan, or later-filed plans, for regulatory treatment of those services was appropriate. Id. If Verizon did not meet its burden in the first phase, the second phase would consist of an investigation into which form of regulation, be it a continuation of price cap, a restoration of rate of return regulation, or some alternative, would be appropriate for the level of competition demonstrated in Phase I. Id. at 18. The Department concluded that at the start of the second phase, the Department would address whether the additional categories that the parties argued should be included in the scope (e.g., universal service funding, price floors, access reform, etc.) would be included in the second phase of the proceeding. Id.

2. August 29 Interlocutory Order

On July 25, 2001, Verizon appealed the Hearing Officer's denial of Verizon's motion for protective treatment of its response to information request DTE-VZ-2-9. On August 29, 2001, the Department issued an interlocutory Order upholding in part and modifying in part the Hearing Officer's ruling. Verizon, D.T.E. 01-31-Phase I, Interlocutory Order on Verizon Massachusetts' Appeal of Hearing Officer Ruling Denying Motion for Protective Treatment (August 29, 2001) ("August 29 Interlocutory Order").

3. December 13 Interlocutory Order

On November 14, 2001, Verizon filed a Motion to Strike, or, in the Alternative, to Supplement Surrebuttal Testimony in response to the November 1, 2001 pre-filed testimony of AT&T's witness Deborah S. Waldbaum. In its Motion, Verizon argued that portions of the Waldbaum testimony that addressed Verizon's provisioning of special access services should be struck from the record. On December 13, 2001, the Department issued its interlocutory Order granting Verizon's Motion. Verizon, D.T.E. 01-31-Phase I, Interlocutory Order on Verizon's Motion to Strike, Or, in the Alternative, to Supplement Surrebuttal (December 13, 2001) ("December 13 Interlocutory Order").

Noting that both the Department and the Federal Communications Commission ("FCC") have open proceedings investigating special access provisioning, the Department concluded that

Verizon's special access provisioning, and indeed Verizon's provisioning of wholesale facilities in its entirety, was outside the scope of the proceeding. December 13 Interlocutory Order at 4-5. The Department explained that when Verizon provisions facilities that are essential for its competitors, such as interconnection, UNEs, resale, and special access, Verizon either provisions those facilities on a reasonable, non-discriminatory basis, or it does not. Id. at 5. If it does not, the result is either penalties pursuant to the Performance Assurance Plan or the Consolidated Arbitrations performance standards,[9] or investigations by the Department or FCC, such as the ongoing special access investigations. Id. The Department noted that the cycle of events in all such cases, separate and apart from the Department's investigation into competition in this proceeding, is "non-compliance**?** investigation/penalty**?** correction." Id. Therefore, the Department concluded that any possible negative effects that would result from Verizon's special access provisioning would be resolved in other proceedings. Id. The Department then requested that the parties provide additional testimony during the evidentiary hearing on the effect on competition of a market structure that relies on this corrective mechanism. Id. at 6.

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9 The Department first established wholesale performance standards and penalties for Verizon in its Consolidated Arbitrations proceeding. See Consolidated Arbitrations, D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94-Phase 3 Order (1996); Phase 3-B Order (1997); Phase 3-C Order (1997); Phase 3-F Order (1999); Phase 3-G Order (2000). In D.T.E. 99-271, as part of the Department's review of Verizon's application to provide in-region long distance service in Massachusetts, the Department adopted a Performance Assurance Plan ("PAP") and Carrier-to-Carrier Performance Guidelines containing measurements, standards, and reporting requirements used to evaluate Verizon's wholesale performance and to prevent "backsliding." Verizon, D.T.E. 99-271, Order Adopting Performance Assurance Plan (September 5, 2000) ("Order Adopting PAP").

B. Pending Matter: AT&T Appeal of Hearing Officer Ruling Denying Protective Treatment

1. Introduction

On September 14, 2001, AT&T filed an appeal of a Hearing Officer ruling denying AT&T's motion for protective treatment of portions of the August 24, 2001 pre-filed testimony of AT&T's witness Anthony Fea ("AT&T Appeal"). The portions of the Fea testimony for which AT&T seeks protective treatment are: 1) the approximate percentage of AT&T's business customers provided service through Type I provisioning;[10] 2) the approximate percentage of AT&T's business customers served through Type II provisioning; and 3) the approximate percentage of AT&T's Type II arrangements that include facilities and equipment obtained from Verizon. In her ruling, the Hearing Officer determined that AT&T had not explained in its motion for protective treatment to what competitive harm AT&T would be subject to, given that AT&T had publicly disclosed whether the three percentages in question were greater or lesser than 50%, and was merely seeking protection for the more exact, but still approximate, percentages. Verizon, D.T.E. 01-31-Phase I, Hearing Officer Ruling on Motion of AT&T Communications of New England, Inc. for Protective Treatment at 4-5 (September 7, 2001) ("Hearing Officer Ruling"). No other party filed comments regarding AT&T's appeal.

2. Standard of Review for Confidential Treatment

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[10] According to AT&T, Type I-provisioned customers receive service through AT&T's own facilities, and Type II-provisioned customers are served by equipment and facilities that AT&T leases from other carriers (AT&T Motion for Protective Treatment at 2, D.T.E. 01-31-Phase I (August 24, 2001)).

Information filed with the Department may be protected from public disclosure pursuant to G.L. c. 25, § 5D, which states in part that:

> The [D]epartment may protect from public disclosure, trade secrets, confidential, competitively sensitive or other proprietary information provided in the course of proceedings conducted pursuant to this chapter. There shall be a presumption that the information for which such protection is sought is public information and the burden shall be upon the proponent of such protection to prove the need for such protection. Where such a need has been found to exist, the Department shall protect only so much of the information as is necessary to meet such need.

G.L. c. 25, § 5D permits the Department, in certain narrowly defined circumstances, to grant exemptions from the general statutory mandate that all documents and data, regardless of physical form or characteristics, received by an agency of the Commonwealth are to be viewed as public records and, therefore, are to be made available for public review. See G.L. c. 66, § 10; G.L. c. 4, § 7, cl. twenty-sixth (a) ("specifically or by necessary implication exempted from disclosure by statute").

G.L. c. 25, § 5D establishes a three-part standard for determining whether, and to what extent, information filed by a party in the course of a Department proceeding may be protected from public disclosure. First, the information for which protection is sought must constitute "trade secrets, confidential, competitively sensitive or other proprietary information"; second, the party seeking protection must overcome the G.L. c. 66, § 10 statutory presumption that all such information is public information by "proving" the need for its non-disclosure; and third, even where a party proves such need, the Department may protect only so much of that information as is necessary to meet the established need and may limit the term or length of time such protection will be in effect. See G.L. c. 25, § 5D.

Previous Department applications of the standard set forth in G.L. c. 25, § 5D reflect the narrow scope of this exemption. See Boston Edison Company: Private Fuel Storage Limited Liability Corporation, D.P.U. 96-113, at 14, Hearing Officer Ruling (March 19, 1997) (exemption denied with respect to the terms and conditions of the requesting party's Limited Liability Company Agreement, notwithstanding party's assertion that such terms were competitively sensitive); see also Standard of Review for Electric Contracts, D.P.U. 96-39, at 2, Letter Order (August 30, 1996) (Department will grant exemption for electricity contract prices, but "[p]roponents will face a more difficult task of overcoming the statutory presumption against the disclosure of other [contract] terms, such as the identity of the customer"); Colonial Gas Company, D.P.U. 96-18, at 4 (1996) (all requests for exemption of terms and conditions of supply contracts from public disclosure denied, except for those terms pertaining to pricing).

All parties are reminded that requests for protective treatment have not and will not be granted automatically by the Department. A party's willingness to enter into a non-disclosure agreement with other parties does not resolve the question of whether the response, once it becomes a public record in one of our proceedings, should be granted protective treatment. In short, what parties may agree to share and the terms of that sharing are not dispositive of the Department's scope of action under G.L. c. 25, § 5D, or c. 66, § 10. See Boston Electric Company, D.T.E. 97-95, Interlocutory Order on (1) Motion for Order on Burden of Proof, (2) Proposed Nondisclosure Agreement, and (3) Requests for Protective Treatment (July 2, 1998).

3. AT&T's Position

In its appeal of the Hearing Officer ruling denying AT&T's motion for protective treatment, AT&T argues that the Hearing Officer exceeded her discretion by failing to strike a proper balance between the protection of proprietary materials and the public's interest in having documents placed on the public record (AT&T Appeal at 1). AT&T argues that the Hearing Officer's ruling was inconsistent with the applicable legal standard and, if allowed to stand, the ruling will have a negative effect on the voluntary participation of AT&T and other competitive local exchange carriers ("CLECs") in future Department proceedings (id. at 2). AT&T argues that the "heightened burden" required by the Hearing Officer goes beyond showings that have been made in the past, particularly when the information in question belongs to an intervenor in a Department proceeding, and when the information has been made available to the Department and all parties subject to protective agreements (id. at 4).

AT&T argues that there is a significant difference between a competitor knowing that AT&T relies on leased facilities for provisioning more than 50% of its services (as AT&T publicly disclosed) and whether AT&T relies on leased facilities for providing 51% or 99% of its services (id.). AT&T states that it is generally understood that most carriers rely on the incumbent provider for more than half of their access facilities, and therefore that disclosure by AT&T is merely a statement of a fact generally known throughout the industry (id. at Att. B, ¶¶ 3,7). However, explains AT&T, a competitor could use the exact percentage of facilities leased by AT&T as an unfair marketing tool (id. at 5). For example, AT&T argues, if the numbers were disclosed, a competitor could state to a potential customer that it provisions 5%

or 10% fewer customers through leased facilities than AT&T, and thus make a representation that the competitor's service was therefore better than AT&T's (id. at 5; Att. B, ¶ 6).

AT&T further argues that the information for which AT&T seeks protection was developed for AT&T's internal purposes, is not shared with non-AT&T employees for their personal use, and is not considered public information (id. at 5). Lastly, AT&T argues that placing this type of CLEC information on the public record could have a chilling effect on CLEC participation in future Department proceedings (id. at 6). AT&T argues that, in a non-monopoly environment, the public's interest in disclosure is not adverse to AT&T in the same sense as the public's interest was adverse to the monopoly provider in traditional regulatory proceedings for which the laws and precedent that delineate proprietary and public information were initially developed (id.).

4. Analysis and Findings

We will first address AT&T's claim in its Appeal that the need for public disclosure of documents filed in Department proceedings was more imperative in a monopoly environment than it is in an environment where competitors operate. We do not agree. The Department's statutory responsibility as custodian of public records has not changed with the advent of competition in the industries within our jurisdiction. We do not review motions for protective treatment based upon whether the moving party is a monopoly provider or whether it is a competitive service provider, or indeed whether the moving party is the subject of a Department investigation or an intervenor in an investigation. What has changed with the introduction of competitive service providers in Department proceedings is that the need has increased for all participants to identify narrowly the precise information for which they seek exemptions of the statutory presumption in favor of disclosure, and to accompany their requests with proof of the need for non-disclosure. As we stated in the August 29 Interlocutory Order at 6-7:

> [W]e note that increasing levels of competition in traditionally regulated industries has made an accurate demarcation between confidential and non-confidential materials even more imperative, and, therefore, the need for parties to support their assertions adequately is even greater. . . . The Department recognizes that the disclosure of certain information that is truly competitively sensitive could thwart the creativity and innovation benefits which flow from competition. Although the Department has no desire to disclose information that is truly competitively sensitive, we are constrained by the statute requiring public disclosure absent proper showing of compliance with the statute.

(internal citations omitted). Therefore, while the Department's responsibility with regard to protective treatment of confidential information has not changed with the transition from a monopoly to a competitive environment, all parties' interests in, and the benefits resulting from, proving the need for non-disclosure are greater in a competitive environment. Contrary to AT&T's assertion, this understanding will not chill future CLEC participation in Department proceedings because both incumbents and competitors are and will be treated equally.

Our primary question, then, is whether AT&T has proved the need for non-disclosure of the information for which it seeks protection in its original motion for protective treatment. We agree with the Hearing Officer that AT&T did not explain in its original motion why public disclosure of the approximate percentages at issue would shed any more light on AT&T's internal decision-making processes, marketing plans, and entry strategies, than the information AT&T provided publicly. See Hearing Officer Ruling at 4-5. We also agree with the Hearing

Officer that AT&T did not address in its original motion how the information sought to be protected would be used by competitors to AT&T's disadvantage if the information were disclosed. See id. at 5. However, in its Appeal, AT&T offered additional argument, and provided additional information through the affidavit of Joseph G. Stack, Division Manager of AT&T's Business Local Services Unit. While administrative efficiency requires that a moving party state his or her claim fully to the Hearing Officer and, if dissatisfied, appeal the ruling on the petition as presented below, we offered Verizon the opportunity to present additional argument on its appeal of a confidentiality ruling earlier in this proceeding (see August 29 Interlocutory Order at 8), and because we have an overriding interest in developing as complete an informational record as possible on the issue in question, we will examine the additional information provided in AT&T's Appeal. However, the Department is not establishing here a general policy allowing carriers "two bites at the apple" when disappointed by a ruling. The rule is and should be that a movant should state his case fully when the motion is filed and not expect to supplement with new facts and argument on appeal.

AT&T asserts that it is commonly known throughout the industry that competitive carriers rely on the incumbent provider's facilities (in this case, Verizon's facilities) for more than 50% of their customers, and, therefore, that competitive carriers use their own facilities to serve less than 50% of their customers (AT&T Appeal at 4, Att. B, ¶ 3). AT&T also asserts that customers will choose service providers on the basis of the level of quality available to the customer, which is affected by the nature of the facilities used to serve that customer (id. at 4, 5, Att. B, ¶ 4). AT&T further asserts that competing carriers use the percentage of their leased facilities as marketing means for distinguishing themselves from their competitors (id. at Att. B, ¶ 6). Therefore, the Department agrees with AT&T that a carrier competing with AT&T in Massachusetts could use the information contained in the Fea testimony as a marketing tool to gain unfair competitive advantage, and, therefore, that information should be protected. We find that by redacting just the three percentages at issue in the public version of the Fea testimony, we will be narrowly providing protection to only the information that is necessary to meet the need for protection shown by AT&T. We also find that, because the percentages at issue will fluctuate as AT&T expands its full-facilities-based operations in Massachusetts, the possibility of competitive harm resulting from disclosure of this information will lessen over time. Therefore, the protection we order here will extend for two years from the date of this Order, at which time AT&T may, if it chooses, move the Department to further extend such protection. But the presumption then, as now, will run in favor of denial of nondisclosure protection, as is consistent with § 5D.

III. VERIZON'S PROPOSED PLAN

As discussed above, Verizon submitted its Proposed Alternative Regulation Plan to the Department on April 12, 2001. The Department's initial review of the Plan was narrowed by the June 21 Interlocutory Order (see Section II.A.1, above) in that the Department's investigation in this phase has been limited to whether there is sufficient competition in Massachusetts to justify the pricing flexibility that Verizon proposed in its Plan. A brief overview of Verizon's Plan and the regulatory treatment sought for different classes of service follows.

A. Treatment of Residential Services

In its Plan, Verizon proposes to eliminate Touch Tone service charges in Massachusetts on a revenue-neutral basis, a move that will increase the Residence Dial Tone Line rate from $9.91 per month to $10.38 per month. Verizon then proposes to cap basic dial-tone and local usage rates for three years. In addition to the cap, Verizon proposes that it be permitted the flexibility to choose to reduce basic residential rates in specific areas of the state during the three-year cap at its discretion. After three years, any increase in the basic residential service cap would require Department approval. The pricing of all other residential services (i.e., non-basic residential services) would be restricted by revenue neutral filings; however, Verizon proposes that it have the discretion to raise or lower rates in specific geographic areas.

B. Treatment of Business Services

Verizon proposes full market-based pricing flexibility for all of its retail business services. Verizon further proposes that it have the ability to raise or lower prices for individual business services in specific areas, as opposed to state-wide pricing.

C. Treatment of Other Services

According to Verizon's proposal, pricing for certain Verizon services, such as pole and conduit charges and late payment charges, that are governed by requirements developed in separate Department proceedings, would not be subject to pricing flexibility. In addition, Verizon proposes that for all new non-residential products and services (which can include new combinations of existing services), it be granted full market-based pricing flexibility and the ability to offer these new services only in specific geographic areas.

D. Service Quality and Intrastate Access Charge Reform

Verizon included in its Plan a proposal for continuation of the Service Quality Plan developed in D.P.U. 94-50, as well as provisions for access charge reform; however, in the June 21 Interlocutory Order, the Department determined to postpone review of these provisions until the conclusion of the Department's investigation in Phase I.

IV. STANDARD OF REVIEW AND REGULATORY HISTORY

A. Statutory Requirements

The Department's jurisdiction for regulation of intrastate telecommunications common carriers within the Commonwealth is provided under G.L. c. 159. The Department has broad general supervisory power over the provision of telecommunications services. G.L. c. 159, § 12; see also G.L. c. 166. Sections 14 and 20 of G.L. c. 159 give the Department authority over the rates of common carriers subject to the Department's jurisdiction.[11] See also G.L. c.

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11 G.L. c. 159, § 14 states in part:

(continued…)

159, § 17 ("All charges made . . . by any common carrier for any service rendered . . . shall be just and reasonable . . . and every unjust or unreasonable charge is hereby prohibited and declared unlawful").

Thus, under G.L. c. 159, the Department is responsible for ensuring a "just and reasonable" standard for ratemaking purposes. Section 14 also requires that rates not be unjustly discriminatory or unduly preferential. See Attorney General v. Department of Pub. Utils., 390 Mass. 208, 234 (1983), citing American Hoechest Corp. v. Department of Pub. Utils., 379 Mass. 408, 411 (1980). While the General Court specifies that rates are to be "just and reasonable" and that rates should provide a utility with "reasonable compensation" with reference to the service provided, neither of these two statutes prescribe a particular method by which the Department must fulfill its statutory mandate of setting just and reasonable rates or limit the Department to a specific regulatory scheme, such as cost of service, rate of return

[11](…continued)

> Whenever the department shall be of the opinion, after a hearing had upon its own motion or upon complaint, that any of the rates, fares or charges of any common carrier for any service to be performed within the commonwealth, or the regulations or practices of such common carrier affecting such rates, are unjust, unreasonable, unjustly discriminatory, unduly preferential, in any wise in violation of any provision of law, or insufficient to yield reasonable compensation for the service rendered, the department shall determine the just and reasonable rates, fares and charges to be charged for the service to be performed . . . [emphasis added].

G.L. c. 159, § 20 states in part:

> If [as regards] . . . any proposed decrease in any rate . . . it shall appear to the department that the said rate, joint rate, fare, telephone rental, toll or charge is insufficient to yield reasonable compensation for the service rendered, the department may determine what will be a just and reasonable minimum to be charged . . . [emphasis added].

ratemaking, or indeed, regulation through a price cap. See NYNEX Price Cap Regulation, D.P.U. 94-50, at 37-38, Interlocutory Order on Motion to Dismiss of NECTA (February 2, 1995) (containing a comprehensive evaluation of Department authority to permit alternatives to the rate of return regulation model). In addition, the Department has determined that rates charged by non-dominant carriers for all services and by dominant carriers for sufficiently competitive services are presumed to be just and reasonable *due to the disciplining effects of competitive forces*. See IntraLATA Competition Order, D.P.U. 1731, at 64-70 (1985). This central point made by D.P.U. 1731 lies at the heart of the instant investigation. In this proceeding, moreover, no party has argued that the Department does not have the authority to consider alternatives to the current form of retail regulation under which Verizon operates.

B. IntraLATA Competition Order, D.P.U. 1731 (1985)

In D.P.U. 1731, subsequent to the 1984 divestiture of the Bell Operating Companies from AT&T, the Department developed a new framework of regulation for all common carriers in Massachusetts. IntraLATA Competition Order, D.P.U. 1731 (1985). In that Order, the Department established telecommunications policy goals and adopted an overall regulatory framework and pricing approach flexible enough to react to marketplace changes.[12] Id. The Department determined that while simulation of the results of a competitive market is a principle goal of regulation, actual competitive telecommunications markets are preferable to

[12] The three public policy goals adopted by the Department in D.P.U. 1731 were economic efficiency, fairness, and universal service. D.P.U. 1731, at 19-24. The Department later adopted the additional policy goals of simplicity, earnings stability, and continuity. New England Telephone and Telegraph Co., D.P.U. 86-33-C at 22 (1987).

regulation as a surrogate for competition. Id. at 25. The Department endorsed competitive markets over regulation as the best way to achieve its policy goals for telecommunications, because competitive markets promote economic efficiency, technological innovations, and a greater sensitivity to customer demands. Id.

In that Order, the Department created a regulatory classification of "dominant" or "non-dominant," in order to determine the level of price regulation that would be applied to all common carriers. Id. at 61-62, 67-69. Under this classification, dominant carriers were subject to traditional regulatory requirements, and non-dominant carriers were presumed to be disciplined by market forces and to have no ability to exercise market power. Id. at 64. Dominant carriers were allowed to petition for a change in classification in response to marketplace changes. Id. at 65. While retaining traditional rate of return regulation for New England Telephone and Telegraph ("NET," now Verizon) and for AT&T as dominant carriers, the Department stated, "if an entire service class is determined to be fully competitive by the Department, we may find that the prices set by the market are fair and reasonable, and we will regulate such service class in accordance with minimum statutory requirements. Such a determination may be made only upon a showing by [the carrier] that such a service is fully competitive." Id. at 39-40. Thus, the Department anticipated that Massachusetts markets could reach a point where competition, rather than regulation, would govern the prices for some of a dominant carrier's retail telecommunications services.

C. NET–Centrex, D.P.U. 85-275/276/277 (1985)

In this proceeding, the Department found that NET's Centrex service class was fully competitive, and that it was consistent with D.P.U. 1731 to permit NET to price its Centrex systems based upon market conditions. NET–Centrex, D.P.U. 85-275/276/277, at 3 (1985).

D. NET–Intellidial, D.P.U. 88-18-A (1988)

In D.P.U. 88-18-A, the Department found that, given the absence of market power in the telephone equipment market, NET's Intellidial service offering was sufficiently competitive for both residence and business customers such that NET could price the service based upon market considerations. NET–Intellidial, D.P.U. 88-18-A at 8-9 (1988).

E. New England Telephone and Telegraph Co., D.P.U. 89-300 (1990)

Beginning in 1986, the Department conducted a multi-phase investigation into the costs and rates of NET, including approval of a marginal cost study. New England Telephone and Telegraph Co., D.P.U. 86-33-0 (1990). The Department then began a series of annual, revenue-neutral "rate re-balancings" to bring NET's retail rates more in line with the underlying cost structure. New England Telephone and Telegraph Co., D.P.U. 89-300 (1990); New England Telephone and Telegraph Co., D.P.U. 91-30 (1991); New England Telephone and Telegraph Co., D.P.U. 92-100 (1992); New England Telephone and Telegraph Co., D.P.U. 93-125 (1994). In that process, the Department significantly reduced the rates for business customers and toll, local usage, and switched access services, as well as eliminated message units and different rate groups for local unlimited services. The Department also increased rates for some basic residential services, including the fixed rate for Dial Tone Line and for analog private line services.

F. AT&T Customer Specific Pricing, D.P.U. 90-24 (1991)

In D.P.U. 90-24, the Department found that competitive bidding may, in appropriate circumstances, supply a reasonable basis for price differences embodied in customer-specific tariffs. AT&T Customer Specific Pricing, D.P.U. 90-24, at 18 (1991).

G. AT&T Communications of New England, Inc., D.P.U. 90-133/90-133-1 (1991)

In D.P.U. 90-133/90-133-1, AT&T filed a petition requesting that it be classified as a "non-dominant" carrier in the interLATA and intraLATA markets pursuant to the regulatory framework established by the Department in D.P.U. 1731. AT&T Communications of New England, Inc., D.P.U. 90-133/90-133-1, at 1 (1991). In denying AT&T's petition, the Department found that, while some aspects of the market had changed greatly since the issuance of D.P.U. 1731, AT&T continued to be a dominant carrier in the interLATA market, and administrative practicality required the same regulatory treatment for the intraLATA market. Id. at 43-44. The Department also stated that AT&T could request that certain of its services be classified as "sufficiently competitive," and, thus, would be subject to less stringent review. Id. at 32.

H. AT&T Alternative Regulation, D.P.U. 91-79 (1992)

In D.P.U. 91-79, AT&T filed a petition requesting that the Department adopt an alternative form of regulation for AT&T's Massachusetts intrastate services. AT&T proposed that certain of its services be classified as "Category M" (i.e., sufficiently competitive) services, with prices set by competitive market forces, and its remaining services classified as "Category D" services, with prices regulated according to a price cap. AT&T Alternative Regulation, D.P.U. 91-79, at 1 (1992). In classifying the majority of AT&T's services as Category M, and thus subjecting those services to reduced regulatory scrutiny, the Department stated that "sufficient market forces are in place to ensure that rates charged by AT&T for its proposed Category M services are just and reasonable." Id. at 34. The Department based its decision on an analysis of market share, supply elasticity, and demand characteristics, and concluded that AT&T did not have market power in Massachusetts with respect to Category M services. Id.

Regarding AT&T's Category D services, the Department found that although there was not as much competition as with Category M services, there was some competition since Basic (low volume) MTS customers had alternatives to AT&T for long distance service. Id. at 43. The Department determined that any market power AT&T had was the result of demand inertia and not bottleneck control of the market. Id. at 44. Thus, the Department found that rate of return regulation would not be necessary. Id. The Department determined that the weighted-average price cap mechanism it approved for AT&T contained sufficient regulatory safeguards which, coupled with market forces, would result in just and reasonable rates for its Basic MTS customers. Id. at 34. Operator service rates were capped at current levels, unless AT&T could show with marginal cost data that price increases were justified. Id. at 56. Except for Basic MTS and operator services, prices for AT&T's services were regulated according to market-based pricing principles, in the same way that the Department has regulated prices of services offered by non-dominant carriers.

I. Price Cap Order, D.P.U. 94-50 (1995)

In D.P.U. 94-50, the Department concluded that adoption of a price cap as an alternative form of regulation for NYNEX (now Verizon), did not require a specified level of competition or market structure (see D.P.U. 94-50, at 112-115 (1995)); however, "[i]f NYNEX were requesting market-based pricing in the instant petition, it would certainly be required to make a showing of effective competition in order for the Department to consider granting such relief." Id. at 114-115. The Department also concluded that price cap regulation was not appropriate for a fully competitive market and "if effective competition exists, no rate regulation whatsoever (ROR regulation, price caps, etc.) would be needed . . . [because] [i]n a competitive market, competition itself will lead to the efficient outcome." Id. at 113.

J. AT&T Communications of New England, Inc., D.P.U. 95-131 (1996)

In D.P.U. 95-131, after approving a stipulation regarding supply and demand elasticities, market share, and other factors including AT&T's rate reductions, the Department reclassified AT&T as a non-dominant carrier in Massachusetts for the interLATA and intraLATA markets. AT&T Communications of New England, Inc., D.P.U. 95-131, at 8-9 (1996). As a non-dominant carrier, AT&T's rates for Basic MTS and operator services were no longer subject to price cap regulation, and there was no longer a need to distinguish between AT&T's Category M and Category D services. Id. Consistent with the Department's practice since D.P.U. 1731, as a non-dominant carrier, all of AT&T's services became subject to market based pricing. Id.

V. SUFFICIENT COMPETITION

In our interlocutory Order on scope, we determined that Verizon's April 2001 proposal for regulatory treatment was similar in many respects to AT&T's proposal for alternative regulation in D.P.U. 91-79 (1992). See June 21 Interlocutory Order at 16. We further determined that the Department's response to Verizon's proposal would depend upon the success of Verizon's showing of "sufficient competition" for the services for which Verizon sought pricing flexibility. Id. A finding that a service is sufficiently competitive (that is, devoid of significant market power so that the interplay of market forces can lead to efficient prices that are protective of customers as are regulator-set just and reasonable rates) and a finding that there are sufficient safeguards to protect against unfair pricing practices that may ensue from market-based pricing, permits the Department to approve full pricing flexibility for that service. See AT&T Alternative Regulation, D.P.U. 91-79, at 18 (1992). The standard approach to evaluating the market power of a petitioning firm, which the Department utilized in its analysis in D.P.U. 91-79, relies on several factors, including a determination of the relevant product and geographic markets, supply elasticity of other firms, market share, and demand elasticity. See id. at 31-36.

A. Relevant Product and Geographic Market

1. Introduction

In order to evaluate a proposal for the reclassification of a service as sufficiently competitive, the Department's first step is to define the relevant market for the services in question in terms of products and geography. Id. at 31. In this section, we define the relevant product and geographic markets to begin our evaluation of the presence of sufficient competition (or conversely, significant market power) for the services for which Verizon has requested full pricing flexibility (i.e., business services).

2. Position of the Parties

a. Verizon

Verizon asserts that it has submitted overwhelming evidence of competition throughout Massachusetts, and that AT&T and the Attorney General's request for "individual supply and demand studies on a wire-center-by-wire-center basis"[13] would be "both wasteful and unnecessary" (VZ Brief at 2). Verizon asserts that because CLECs have access to Verizon's network via resale, unbundled network elements ("UNEs"), or UNE-Platform ("UNE-Ps"), in addition to the option of building their own networks, CLECs have such ease of market entry that a request for "detailed neighborhood-by-neighborhood market power analyses is simply

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13 A wire center is the physical structure where a telephone company terminates subscriber outside plant cable. A central office is a switching unit in a telephone system, providing service to the general public, having the necessary equipment and operating arrangements for terminating and interconnecting lines. In Massachusetts, each Verizon central office is associated with one (and only one) wire center (Exh. AG-VZ-1-18). In this case, Verizon has used the terms "wire center" and "central office" interchangeably.

irrelevant" (id.). In addition, Verizon asserts that its density zone analysis[14] proves that CLEC penetration levels have increased between May and December 2000 and that the distribution of competitive lines is greatest in "the urban and suburban UNE zones" (id. at 14). In particular, Verizon asserts that "CLECs have made substantial and sustainable market penetration in just a few short years" for business customers, the most lucrative market segment (id. at 15). Verizon therefore urges the Department to reject the CLECs' and the Attorney General's claim that a formal market power study is necessary to gauge the level of competition (id. at 5-6).

Verizon claims that AT&T's insistence on specific market power studies will require the consideration of 68 different services in each of the 272 wire centers throughout Massachusetts (VZ Brief at 5). Verizon argues that the requested analysis "would consist of 18,000 different market share studies, which could take years to complete" (id.). While the analysis may ideally produce fairly precise estimates of market power, Verizon asserts that the requisite data is rarely available, making it incredibly difficult, if not impossible, to perform the quantitative studies advocated by AT&T and the Attorney General (id. at 22). Therefore, as a practical matter, Verizon urges the Department to rely on other factors it has considered in the past, including, "the presence of numerous competitors, the vulnerability of Verizon's market share, the widespread availability of capacity in the form of unbundled loops, switching and transport through ubiquitous collocation, and the presence of effective facilities-based competitors with networks of their own" (id. at 23).

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14 Verizon's density zone analysis sorts the line counts of Verizon and its competitors (aggregated by mode of entry) by the four UNE density zones (i.e., metropolitan, urban, suburban, and rural). See Exh. AG-23 (Verizon's M.D.T.E. Tariff No. 17, at Part A, Section 5.1).

Verizon argues that no firm can exercise market power in the absence of barriers to entry (Exh. VZ-5, at 9). Verizon asserts that it is unnecessary to define a wire center as a relevant geographic market because CLECs have the same opportunity to enter the market in every wire center via UNEs (VZ Brief at 22). Likewise, Verizon also considers it unnecessary to define each Verizon service as a separate relevant product market because CLECs can use the same UNEs to provide all the services in question (id.). Verizon explains that since a Herfindahl-Hirschman Index ("HHI")[15] analysis requires the inclusion of uncommitted entrants, the HHI would be the same in every wire center and at the statewide level (id.). Based on the presence of competitors, the availability of capacity in the form of unbundled loops, switching and transport through collocation, and the presence of facilities-based competitors, Verizon concludes that there is effective competition in Massachusetts (id. at 23).

b. CLECs

AT&T argues that Verizon's proposal for pricing flexibility depends entirely on the "presence or absence of significant market power in the relevant markets of Massachusetts"; that is, Verizon must "demonstrate that it faces effective competition from other carriers in the markets for which it seeks deregulation" (AT&T Brief at 39). AT&T notes that despite the fact that standard market power analyses have been utilized by the Department and other regulatory agencies, Verizon elected not to perform such an analysis to bolster its petition for pricing flexibility (id. at 39). AT&T asserts that the "standard economic analysis of the extent of

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15 The HHI is a measurement of market concentration used in antitrust analysis. It is calculated by summing the squares of the market shares of every firm in a particular market.

market power held by a firm begins with the identification of the relevant economic market or markets within which the firm provides service" (Exh. ATT-1, at 21). AT&T explains that economic markets have product and geographic dimensions, and that the relevant product market for local business service can be defined by the substitutability of the service for other services, while the relevant geographic market can be defined by determining the extended area in which a product is available (id. at 40). In response to Verizon's contention that the testimony offered by AT&T and the Attorney General require the relevant geographic market to be defined at the individual wire center basis in Massachusetts, AT&T clarifies that "while the wire center may be an appropriate level of geographic disaggregation of markets, if for a particular relevant service it can be shown that entry and expansion conditions are uniform across all or across some wire centers, then a separate analysis of the elasticity of supply will not be required for every wire center" (Exh. DTE-ATT-2-3). According to AT&T, "wire centers with similar entry rules, regulations, and economic conditions can be aggregated, as well as wire centers with uniform entry," that is, if uniform entry conditions can be shown for a metropolitan area: for example, the wire centers that constitute that metropolitan area can be consolidated into a relevant market, rather than considered individually (AT&T Brief at 40).

AT&T argues that, despite Verizon's "reliance on D.P.U. 91-79 in support of its petition for pricing flexibility," Verizon "does not in this case perform the analysis performed by AT&T, and found appropriate by the Department, in D.P.U. 91-79" (AT&T Reply Brief at 22). AT&T asserts that the first thing AT&T did in D.P.U. 91-79 was to define the relevant product market as "intrastate toll services, including the intraLATA services provided by NET" and the relevant geographic market as the entire Commonwealth. See D.P.U. 91-79, at 20. In addition, AT&T argues that it also "presented a separate evaluation of specific submarkets, including specialized business services, a variety of '800' services, Classic 800 service, private line service, Volume MTS, and Residential MTS," and that the Department considered the merits of its proposal "with respect to each market" (id. at 22-23). AT&T asserts that, in this proceeding, Verizon "treats all telecommunications services provided by all telecommunications carriers as part of the same market as business services" and makes no effort to "define and analyze the market for which deregulation is sought" (id. at 23).

Discussing the relevant product market, AT&T argues that Verizon's reliance on facilities-based providers, such as AT&T Broadband and RCN, to establish the presence of competition for business services is fatally flawed (AT&T Reply Brief at 9). AT&T asserts that these facilities-based companies are providers of only residential services and apply no competitive pressure on the business services for which Verizon seeks pricing flexibility (id.). AT&T further argues that while AT&T Broadband has "a facilities-based network in place to provide cable television to residential customers," it lacks facilities linking its cable plant to business end-users (id.). AT&T argues that Verizon's assertion that just the threat or possibility of AT&T Broadband offering business services is sufficient to discipline Verizon's prices is unconvincing (id. at 10). AT&T argues that "even if AT&T Broadband had the capital and could use its cable plant to provide data and telephony services to business customers, it first needs to upgrade the cable to support the necessary services" (id.). In addition, AT&T argues that because of the difficulties in building the last mile to connect businesses to its network, "if AT&T Broadband were ever to utilize its cable plant to serve business customers, it would most likely need to rely on Verizon's facilities"(id.).

AT&T also objects to Verizon's aggregation of residential and business line counts to prove sufficient competition in Massachusetts for business services (AT&T Reply Brief at 11). AT&T argues that Verizon "fails to state that a large percentage of the lines reflected in these line counts do not actually provide the services for which Verizon is seeking deregulation, namely business services" (id.). For example, AT&T asserts that a large portion of the CLEC lines identified in Verizon's brief as UNE-P lines, as well as a large portion of the CLEC lines that Verizon identified as CLEC-switched lines, are actually residential lines (id.). In addition, AT&T asserts that Verizon includes "companies that purport to offer service" in its supporting material without identifying whether the listed company provides residential or business service, or any service at all (id. at 12). AT&T submits that these "irrelevant services and competitors cannot provide the basis upon which the Department grants Verizon's request for deregulation of its business services as they only demonstrate the weakness of Verizon's case" (id. at 13).

c. Attorney General

The Attorney General argues that the Department must determine "the exact markets under review" in order to conduct a competitive market analysis (AG Brief at 8). The Attorney General notes that this proceeding addresses two distinct Massachusetts markets, residential and business, each containing "customers who have different service requirements, have different costs, and are often serviced by different suppliers" (id. at 8). The Attorney General argues that because the level of competition is different in each market due to the unique market share, supply elasticity, and demand elasticity characteristics of each, the Attorney General recommends that the Department conduct separate reviews of the business and residential markets to determine whether there is sufficient actual competition in each market to ensure just and reasonable prices for consumers (id.).

The Attorney General also criticizes Verizon's attempts to support its assertions about competition with data on the level of competition "aggregated by density zone and purporting to show that some zones are more competitive than others" (AG Reply Brief at 3). The Attorney General asserts that the density zone data simply reveal "low competitive levels for the business market in all but the metropolitan zone, which contains just four wire centers" (id.). Moreover, the Attorney General asserts that the wire center data presented in Verizon's Massachusetts Competitive Profile[16] show that competition is developing at different paces in the various parts of the Commonwealth, even within area codes and density zones, and, therefore, the Department must "protect customers from the potential that Verizon will exercise market power in those non-competitive areas of the Commonwealth" (id.).

In sum, the Attorney General states that because Verizon makes "no attempt to distinguish between the business and the residential markets regarding supply elasticity, demand elasticity, or market share," Verizon combines the two markets into one (id. at 2). The Attorney General argues that in doing so, Verizon fails to meet the first requirement of the Department's test to determine the sufficiency of competition, which is to define the relevant markets (id.).

3. Analysis and Findings

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[16] Verizon compiled the Massachusetts Competitive Profile ("MCP") for use in this case. The MCP contains line counts of Verizon Retail, Resale, UNE-P, and E911 listings (see Section V.C.1., below, for a further description of Verizon's MCP).

As stated above, the definition of relevant markets is the first step in evaluating the presence or lack of market power. The Department has traditionally taken the absence of market power, or equivalently, the presence of sufficient competition, to be the necessary condition for the approval of pricing flexibility for a previously regulated service. We have permitted flexibility where we found that competition would adequately protect consumers' interests by ensuring just and reasonable rates, and have required that the petitioning party demonstrate that changed market conditions warrant a different (i.e., lesser) degree of regulation. AT&T Alternative Regulation, D.P.U. 91-79 (1992); see also IntraLATA Competition Order, D.P.U. 1731, at 65 (1985).

In D.P.U. 91-79, the Department relied on the analysis produced by market power studies, for which market definition is a prerequisite, to inform our deliberation and findings. In this case, Verizon has relied on its analysis of market entry conditions (i.e., supply elasticity), which, if accurate, precludes the necessity of more formal market power studies. For the reasons discussed below, the Department defines the consolidation of all wire centers in the Commonwealth as a single relevant geographic market in this case, and defines the business services for which Verizon seeks pricing flexibility in its proposed Plan (see Exh. AG-21, at 4-6), excepting certain services discussed below, as a single relevant product market.

We will first discuss the relevant product market. Examining Verizon's proposed April 2001 Plan, we agree with the Attorney General that this proceeding addresses at least two distinct product markets: residential and business services. The Department agrees with AT&T and the Attorney General that these two markets have unique market share, supply elasticity, and demand elasticity characteristics. Indeed, Verizon's April 2001 Plan offers different proposals for regulatory treatment of its business and residential services, suggesting that Verizon itself regards the two markets as distinct. Having determined that the residential and business markets are properly divisible, we find that Verizon's aggregation of its residential and business line counts in support of its petition for pricing flexibility of its business services is inappropriate, and that Verizon's reasons for aggregating residential and business data are unconvincing.

Verizon's argument that the threat of entry from facilities-based residential providers exerts sufficient competitive pressure on Verizon's business services assumes that residential competitors are willing and able to build their own facilities and serve the business market. However, Verizon minimizes the capital investment necessary for such an undertaking, and de-emphasizes the economic, technological, and municipal constraints that competitors may face in building the "last mile" to business customers. These constraints could include insufficient traffic volume to justify building facilities, contractual commitments for existing Verizon facilities with termination penalties, lack of collocation capacity, construction difficulties, and municipal fees, requirements and rights-of-way restrictions (Exh. ATT-6, at 10). Therefore, the Department's analysis treats Verizon's business and residential services as clearly separate.[17]

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[17] As additional support for this point, the Department can look to the U.S. Department of Justice and Federal Trade Commission's 1992 Horizontal Merger Guidelines ("DOJ Merger Guidelines"), which describe the analytical process employed in determining whether a merger is likely to create or enhance market power, or facilitate its exercise. DOJ Merger Guidelines at Section 0.2. Although in the instant case we are not looking at a merger, and the DOJ Merger Guidelines do not control the Department's decision, the presence of market power is central to our analysis in this case, and the DOJ

(continued…)

Confining our analysis of sufficient competition strictly to evidence related to Verizon's business services, we consider Verizon's retail business services as a single relevant product market for the purposes of our analysis of sufficient competition in this case. While the Department concludes that it is possible, and perhaps even likely, that certain services in certain areas are much less competitive than others, (e.g., as AT&T points out, RCN's wiring of a residential multiple dwelling unit does not provide much competitive pressure to Verizon's business services (Tr. 4, at 716)), UNEs and resale are available to CLECs in order to provide most of the business services Verizon provides (VZ Brief at 22, n.24). The availability of UNEs and resale for Verizon's business services indicates that entry and expansion conditions are generally similar for all of Verizon's business services, and, therefore, all of Verizon's business services included in Verizon's proposed Plan, excepting those discussed below, can be consolidated into a single relevant product market.

There are certain business services included in Verizon's proposed Plan for pricing flexibility that the Department will treat as a separate market. These services include collocation, special construction, PAL, and PASL (see Exh. AG-21, at 5-6). These services have historically been treated as retail services and are included in Verizon's retail tariff (Tr. 3,

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[17](…continued)

Merger Guidelines provide an instructive and established framework to inform our analysis. Due to the aforementioned constraints with facilities-based entry, the Department concludes that it is highly unlikely that facilities-based residential service providers, such as RCN and AT&T Broadband, would satisfy the criteria of likelihood, timeliness, and sufficiency for potential business market entrants as discussed in the DOJ Merger Guidelines at Section 3.

at 476-477), but are primarily, or, as in the case of PAL and PASL,[18] exclusively intended for purchase by other carriers as wholesale services rather than by end-users as retail services. Therefore, these services will be treated as part of a separate market in the Department's analysis of sufficient competition and eligibility for pricing flexibility. The Department will discuss an appropriate regulatory policy for these wholesale services, as well as switched and special access, later in this Order.

Turning to an analysis of relevant geographic markets, we agree with AT&T that "wire centers with similar entry rules, regulations, and economic conditions can be aggregated [when defining a relevant geographic market], as well as wire centers with uniform entry" (AT&T Brief at 40). By virtue of the Telecommunications Act, all wire centers in Massachusetts have the same general entry rules and regulations (i.e., UNEs and resale are available in every wire center in order to facilitate competitive entry), although economic conditions may vary between wire centers. The availability of UNEs and resale state-wide indicate that entry and expansion conditions for CLECs are generally similar state-wide, and, thus, a state-wide market definition is appropriate. Therefore, all Massachusetts wire centers can be consolidated into a single relevant geographic market for purposes of our analysis of sufficient competition.

B. Supply Elasticity

1. Introduction

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18 Verizon provides PAL ("Public Access Lines") and PASL ("Public Access Smart Lines") to competing providers of payphone service.

Supply elasticity is the ability of firms to change their production of a good or service in response to a change in price of that good or service.[19] Of the three components examined in a market power study, supply elasticity of the competing firms is the most significant because, despite a high market share and a low market demand elasticity, a high supply elasticity can eliminate market power.[20] Supply elasticity is high when competing firms can respond fully to changes in price because there are no barriers to entry, expansion, and exit in a market. In this proceeding, when evaluating the ease of CLEC entry into the Massachusetts telecommunications market, the parties raised arguments regarding the following issues: price barriers to entry, non-price barriers to entry, and contestability. When evaluating the ease of CLEC expansion and exit, the parties raised the further issues of the decline in CLEC market capitalization, and issues involving providing service through resale and UNEs. We will first set forth the parties' positions on all of the above issues, and then present our analysis and conclusions.

2. Ease of Entry

a. Contestability

According to the theory of contestable markets, a firm will not have substantial, economic market power (i.e., the present ability to raise price above marginal cost) even with a very high market share if other firms can enter the industry with the same costs as the incumbent firm(s) and if firms can exit the market without the loss of capital. See e.g.,

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19 See e.g., Dominick Salvatore, Microeconomics 31 (2nd ed. 1994) ("Salvatore").

20 See Exh. DTE-ATT-1-1, at 144 (William M. Landes and Richard A. Posner, Market Power in Antitrust Cases, 94 Harvard L. Rev. 937 (1981)).

Salvatore at 371; G.J. Stigler, The Organization of Industry 67 (1968). If entry and exit are costless, firms will sell their products at a price that only covers their average costs, earning no monopoly profits because they know that if they raised their prices, new firms would quickly enter the market and sell at a lower price. Salvatore at 371. These new firms would drive prices back down to their economically efficient levels. According to this theory, existing firms react to potential competitors as much as, if not more than, existing competitors. Id. The ability to enter and exit the market freely results in a high supply elasticity because firms are able to respond easily to a change in price. See id. at 31. See also United States v. Syufy Enter., 903 F.2d 659, 664-669 (9th Cir. 1990); Ball Memorial Hosp. v. Mut. Hosp. Ins., 784 F.2d 1325, 1335-36 (7th Cir.), reh'g denied, 788 F.2d 1223 (7th Cir. 1986). This section will cover entry conditions and the likelihood of potential entry. The costs to exit will be dealt with in Section V.B.3, below.

(i) Verizon

Verizon asserts that CLEC supply elasticity is high because the Telecommunications Act removed all legal, regulatory, and market-based barriers to entry by allowing resale of Verizon's services at avoided-cost rates, and by allowing UNEs to be leased at total-element, long-run, incremental cost ("TELRIC") rates (Exh. VZ-5, at 3; VZ Brief at 8). Thus, argues Verizon, CLECs can enter the market without the high cost of building their own network facilities (VZ Brief at 8). Verizon argues that the ability to lease UNEs allows CLECs to increase or decrease their supply of telecommunications services at will in response to price changes by Verizon or any other market conditions (Exh. VZ-5, at 8). Verizon asserts that this ability relieves capacity constraints, which Verizon considers to be the primary restrictions on entry and expansion into the telecommunications market that CLECs faced prior to the Act (Tr. 3, at 504-505).

Moreover, Verizon states that both the Department and the FCC in their respective Section 271 proceedings, have already found that the Massachusetts local exchange market is irreversibly open to competition (VZ Brief at 1).[21] Verizon argues that because the market is open to competition, any market power that Verizon might have is constrained by the potential of competing firms to enter the market (id. at 10). Verizon contends that if it increased retail prices to earn monopoly profits, the opportunity to earn a profit by competing with Verizon would attract CLECs to the market and drive prices down to their economically efficient levels (VZ Brief at 10; Exh. VZ-5, at 20).

Verizon asserts that pressure from potential suppliers exists as long as there are no barriers to entry, and that this pressure is not dependent on any level of actual competition (VZ Brief at 10). Verizon argues that, while it was unable to determine an exact number of potential competitors, "You [can] look for proxies. . . . You try to do the best you can [to estimate the number of potential competitors]. And doing the best you can in some circumstances is simply a recognition that there are a large number of CLECs that have the

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21 Evaluation of the Massachusetts Department of Telecommunications and Energy, CC Docket No. 00-176, at 1(October 16, 2000) ("DTE Section 271 Evaluation"); Application of Verizon New England for Section 271 Authority, CC Docket No. 01-90, Memorandum Opinion and Order, FCC 01-130, at ¶ 234 (April 16, 2001) ("FCC Section 271 Order"). In their respective Section 271 proceedings, both the Department and the FCC determined that Verizon had met the requirements of the "14 point competitive checklist" contained in 47 U.S.C. § 271, thereby allowing Verizon's entry into the in-region, long distance market in Massachusetts.

ability to enter with very few limitations under the Act" (Tr. 3, at 517). Verizon further asserts that even the actual number of CLECs operating in Massachusetts at any given time is less important than the fact that there are CLECs serving customers in every exchange in the Commonwealth (VZ Brief at 10-11). Verizon argues that the existence of these CLECs is evidence of the ease of entry into the market, resulting in a high supply elasticity for competing firms that exerts competitive discipline on Verizon (id. at 11). Verizon argues that the presence of existing and potential competitors effectively eliminates its ability to increase retail prices above their competitive rate (id. at 8, 11).

(ii) CLECs

AT&T agrees that if markets are subject to effective competition, then they should be deregulated (Exh. ATT-1, at 25, emphasis added). However, AT&T argues that supply elasticity based on ease of entry is not adequate to measure Verizon's market power and to determine whether there is sufficient competition (AT&T Brief at 43). Instead, AT&T argues that the Department must rely on a market power study as used in standard economic theory (see Exh. ATT-1, at 21-30) and the Department's own precedent (AT&T Brief at 17). AT&T argues that because Verizon did not do a market power analysis, and Verizon's evidence of full-facilities-based competition has been called into question, Verizon should be denied pricing flexibility (id. at 16-17).

AT&T does acknowledge that the availability of UNEs and resale should restrain Verizon's market power (Tr. 4, at 701), and that where barriers to entry are low or nonexistent, a firm will not have any market power despite a low market share for competing firms (Exh. ATT-1, at 24). Nonetheless, AT&T argues that "irreversibly open" to competition does not mean there is "effective competition" (Exh. ATT-2, at 10 n.7). The effects of potential entrants should be considered in a market power analysis, confirms AT&T; however, according to the DOJ Merger Guidelines, only the entry of committed entrants (i.e., those suppliers who have invested in their own facilities) should be considered sufficient to restrain market power (Tr. 4, at 713-715). AT&T argues that effective competitive pressure consists of full-facilities-based competition and retail competition that is not weakened by discrimination at the wholesale level (AT&T Brief at 15). Similarly, Network Plus argues that although Verizon's evaluation under 47 U.S.C. § 271 considered Verizon's "openness" to competition, this case is, instead, about existence of competition that is sufficient to curtail Verizon's market power (Exh. NP-1, at 7).

While AT&T recognizes that supply elasticity measures the ability of both actual and potential competitors to serve customers (AT&T Brief at 41), AT&T concludes that entry is not likely due to the widespread decline in market capitalization for many CLECs (see id. at 46-48). Likewise, Network Plus uses an analysis of declining market capitalization to argue that competing firms will not be able to enter new geographic or product markets in Massachusetts, and, thus, serve customers as a competitive alternative to Verizon (Tr. 1, at 134-136).

AT&T argues that for Verizon to receive pricing flexibility, Verizon not only needs to prove that the market is open to competition but that effective competition already exists in the market (AT&T Brief at 14, emphasis added), which means that Verizon must show that competitors can bring the "full range of competitive pressure" to constrain Verizon's prices (id.). AT&T asserts that Verizon's proof of the existence of competitors is inadequate because Verizon has failed to show that those competitors "exist in sufficient quantities with sufficient capabilities that they constitute a viable alternative to Verizon for a sufficient segment of the market to discipline Verizon's pricing power" (id. at 15-16).

(iii) Attorney General

The Attorney General concurs with Network Plus and AT&T that the existence of low barriers to entry is not a sufficient standard to allow Verizon pricing flexibility (AG Brief at 8-9). The Attorney General points to the recent decision of the Missouri Public Service Commission evaluating the petition for pricing flexibility of Southwestern Bell Communications, which clearly stated that the Section 271 standard is not equivalent to a finding of effective competition (AG Brief at 9, citing Southwestern Bell Communications, Missouri PSC Case No. TO-2001-467, at 17 (December 27, 2001)).

The Attorney General argues that Verizon's MCP is not evidence of the actual competition Verizon faces, but rather merely potential competition, and that potential or "theoretical" competition cannot constrain market power (AG Brief at 15-16). The Attorney General argues that only actual competition can prevent Verizon from increasing prices above their economically efficient levels (id.). The Attorney General emphasizes that the Department must distinguish between actual and potential competition, and urges the Department to find that "the degree of regulation in each market segment depends on the present competition" and that "a danger exists if the Department moves to reduce the degree of regulation before sufficient competitive forces are present in a market" (AG Reply Brief at 6, citing IntraLATA Competition Order, D.P.U. 1731, at 55-56 (1985)).

b. Price Barriers to Entry

A barrier to entry is any factor that prevents firms from operating in a particular market. Barriers to entry are divided into four general categories: absolute cost advantage, economies of scale, product differentiation, and regulatory barriers.[22]

(i) Verizon

Verizon argues that it has demonstrated that there is competition across all markets in Massachusetts and that AT&T has presented no evidence that the market for special access services in particular, is less competitive than other areas (VZ Brief at 30). In response to AT&T's claim that AT&T cannot use the three "safe harbors"[23] provided by the FCC for transferring special access circuits to UNEs, Verizon states that AT&T's inability to meet the FCC's requirements is insufficient for the Department to determine that "effective competition" does not exist (id.). Verizon claims that AT&T did not demonstrate that there was a lack of competition in the "high-end business market where those services [special access] are used" (id.). In addition, Verizon points to the FCC's decisions to grant Verizon "Phase I" and "Phase II" pricing flexibility on the basis that there is "sufficient competition for the provision of special access and dedicated transport services in Massachusetts to preclude the exercise of

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22 See e.g., Edgar K. Browning and Mark A. Zupan, Microeconomic Theory and Applications 330 (5th ed. 1996) ("Browning").

23 See AT&T Brief at 26-29 for a discussion on FCC "safe harbors," and AT&T Brief at 30-32 for a discussion of FCC restrictions on CLEC use of UNEs.

market power" (VZ Brief at 29; Exh. VZ-6, at 5-8). Verizon argues that in Massachusetts, special access services were not included in the PAP because they are a competitive service for which regulatory protection is not necessary (Tr. 2, at 177). However, Verizon acknowledges that pricing network facilities at a level significantly above TELRIC would constitute a barrier to entry for CLECs (id. at 214). Verizon further states that if more UNEs were available beyond what the FCC decided were essential facilities, or if UNE rates were lower, more competition might result (id. at 217). In response to AT&T's arguments regarding access charges, Verizon states that it is necessary and proper to price access above marginal cost in order to cover the high fixed cost of providing service (Exh. VZ-4, at 24).

(ii) CLECs

AT&T argues that because access charges are not based on rates that reflect Verizon's economic costs, Verizon can pursue anti-competitive pricing behavior, such as cross-subsidization, with monopoly profits from access (Exh. ATT-1, at 42). AT&T asserts that there are at least two ways in which above-cost access charges can be used to limit competition in the local exchange markets (id. at 43). First, AT&T contends that profits from access rates can be used to subsidize below-cost local service rates preventing profitable entry into the market (id.). Second, AT&T claims that above-cost access charges give Verizon an incentive to push CLECs into using special access instead of UNEs, thus, paying above-cost rates again (id. at 34, 43-44). AT&T further argues that since Verizon can offer bundled local and long distance service, CLECs may not be able to make a competitive offer because CLECs face higher costs to provide the same bundled services due to Verizon's access charges (id. at 46). AT&T states, "As long as new entrants must pay Verizon supra-competitive prices in order to compete, the competition that does exist will not ensure economically efficient prices for consumers" (id.).

AT&T argues that special access pricing presents a classic barrier to entry by imposing a higher cost on CLECs than is imposed on Verizon (Exh. ATT-1, at 31-32). AT&T claims that competition relies on the ability of CLECs to purchase network elements at TELRIC rates (Exh. ATT-2, at 13).[24] AT&T claims that they began to convert their special access circuits used for local service to UNEs in order to take advantage of "substantial cost savings" (Exh.

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[24] AT&T provides a detailed explanation of how CLECs are precluded from converting special access circuits to UNEs (Exh. ATT-3, at 7-15).

ATT-3, at 7) in accordance with the FCC's UNE Remand Order[25] and Supplemental Order[26] (id. at 6). However, the FCC, in its Supplemental Order Clarification,[27] established three conditions under which special access circuits could be converted to UNEs (id. at 7). AT&T claims that these conditions have proven "almost impossible to satisfy" (id.). AT&T asserts that the Department should deny Verizon pricing flexibility until "all of the inputs, including [Enhanced Extended Links][28] and other high capacity loops, are priced at TELRIC UNE rates" (id. at 15). AT&T responds to Verizon's argument that it is necessary to price switched access charges above marginal costs by stating that AT&T is not asking to have all of Verizon's services priced at marginal cost, and that Verizon should recover its common costs the way that other firms do, by raising retail, rather than wholesale, rates (Exh. ATT-1, at 49-50).

AT&T also asserts that the FCC did not give "Phase II" pricing flexibility to Verizon because Verizon has not, in fact, applied for it (Tr. 2, at 230-231). Accordingly, AT&T argues that Verizon's analysis of competition for special access services based on the FCC's

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25 Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, Third Report and Order, FCC 99-238 (rel. November 5, 1999) ("UNE Remand Order").

26 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, Supplemental Order, FCC 99-379 (rel. Nov. 24, 1999) ("Supplemental Order").

27 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, Supplemental Order Clarification, FCC 00-183 (rel. June 2, 2000) ("Supplemental Order Clarification").

28 Enhanced Extended Links ("EELs") are combinations of unbundled loops, multiplexing/concentrating equipment, and dedicated transport.

granting of “Phase II” pricing flexibility is not applicable (id.).[29] Network Plus concurs with AT&T that, under Verizon’s proposed regulatory plan, Verizon could lower prices and drive competition out of the market on some services (despite the fact that Verizon would have to offer below-cost resale discounts) because Verizon could raise prices on services that are not competitive and recoup their losses through cross-subsidization (Exh. NP-1, at 8).

c. Non-Price Barriers to Entry

Non-price barriers to entry, such as product differentiation and regulatory barriers, are examples of how firms prevent other firms from competing in a market without using the price of inputs or final goods and services as a means to do so. See Browning at 330. Product differentiation barriers occur when the same product is considered to be sufficiently different among firms to cause a consumer to pay a higher price for what he perceives to be a better product. Id. The following section will consider whether Verizon can discriminate against CLECs in the wholesale market by causing a product differentiation barrier in the retail market.

(i) Verizon

Verizon asserts that its position as a monopoly wholesale provider does not decrease the supply elasticity of CLECs because there is a mechanism in place (i.e., the PAP) to regulate

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[29] At the time of the evidentiary hearings in this case, Verizon had applied for, but had not yet received from the FCC, Phase II pricing flexibility for all special access services except channel terminations in Boston (Tr. 3, at 564-565). On March 22, 2002, the FCC granted Verizon’s Phase II pricing flexibility petition. In the Matter of Petition of Verizon for Pricing Flexibility for Special Access and Dedicated Transport Services, CCB/CPD File No. 01-27, Memorandum Opinion and Order, DA 02-706 (rel. March 22, 2002). This contradicts AT&T’s assertion of the facts, but not necessarily AT&T’s point, because Verizon has not suggested that the Department use the FCC standards for granting Phase I and Phase II pricing flexibility in evaluating competition in Massachusetts.

non-price discrimination[30] in the wholesale market (Tr. 3, at 506, 512). In its Reply Brief, Verizon states that the small penalty payments it has made for provisioning of wholesale services under the PAP is a reflection of Verizon's good service quality to CLECs (VZ Reply Brief at 17). Verizon also asserts that both the Department and the FCC have determined that the PAP provides "meaningful economic incentives" to guard against discrimination in wholesale provisioning and maintenance (id., citing DTE Section 271 Evaluation at 412, FCC Section 271 Order at ¶¶ 240-247). Verizon also argues that it has met or exceeded the established performance metrics approximately 90% of the time (VZ Reply Brief at 19).

(ii) CLECs

AT&T argues that the PAP is "too nascent" for the Department to determine if it is effective in providing provisioning parity for UNEs (Exh. DTE-ATT-2-6). AT&T further asserts that the effectiveness of the PAP is limited because the PAP does not measure special access services, contains inadequate monetary incentives, includes delays in penalty payments, and is overly complex (AT&T Brief at 37). AT&T argues that the Department has no plan in place that will ensure provisioning parity for special access services (id. at 38). According to AT&T, other non-price barriers to entry include Verizon's requirement that CLECs interconnect with Verizon when collocating at a central office, even when such interconnection is not necessary; Verizon's refusal to allow CLECs to commingle their local and long distance

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30 An example of non price discrimination in the wholesale market would be if Verizon were to take 15 days to provision a T1 circuit for a CLEC and only 5 days to provision a T1 circuit for its own retail customer. This type of discrimination in the wholesale market makes the CLEC's T1 different from a Verizon T1, which might cause a customer to pay more for Verizon's T1 service. Hence, non-price discrimination in the wholesale market can potentially cause a non-price barrier in the retail market.

traffic as Verizon itself does; and municipal regulations that disproportionately affect CLECs. See Exhs. DTE-ATT-2-1, DTE-ATT-2-4, DTE-ATT-2-5 n. 1.

(iii) Attorney General

The Attorney General argues that because the PAP audit[31] is not complete, the Department should not grant Verizon pricing flexibility before reviewing the results of the audit because "the Department will lack sufficient basis from which to draw any conclusions as to the PAP cycle's effectiveness" (AG Brief at 25-28). The Attorney General agrees with AT&T that the PAP penalties must exceed the economic benefit that Verizon would receive from violating the PAP, and that the current delay in receiving penalty payments could be detrimental to CLECs (id. at 24-26). In addition, the Attorney General argues that the PAP audit process should be more "open" with input from, inter alia, the Department and the Attorney General for all "critical aspects" of the PAP (id. at 27). According to the Attorney General, these aspects include the RFP bidding process, the selection of the auditor, and the draft and final audit reports (id. at 27). Opening the bidding and auditing processes to the public will ensure that the results are "competitive, objective, fair and accurate" and will "increase CLEC willingness to enter and compete" in the market (id. at 27-28).

3. Ease of Expansion and Exit

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31 As discussed above, the PAP is a self-executing remedy plan designed to prevent the serious degradation in the quality of wholesale service provided to competing carriers by Verizon (i.e., "backsliding"). See Order Adopting PAP at 1. An annual audit of the PAP was established to provide reasonable assurances that the reported data is accurate. Id. at 32-33. The audit takes place every year beginning six months after Verizon received its Section 271 approval in Massachusetts and is conducted by an independent audit firm, selected by the Department through a competitive bidding process in consultation with, and paid for by, Verizon. Id. at 33.

a. Decline in Market Capitalization

(i) Verizon

Verizon argues that CLECs who depend on Verizon's network (i.e., those providing service through resale and UNEs) are better able to compete than those who do not depend on Verizon because resale and UNEs eliminate the incumbent's advantages of scale and scope (Tr. 2, at 165-166). Verizon argues that the decline in CLEC market capitalization has not halted CLEC plans for expansion, does not affect CLECs' ability to sign up new customers, and has not prevented CLECs from gaining market share in Massachusetts (Tr. 3, at 506-507). Verizon states that market capitalization only indicates "how investors value the ownership of assets in these firms. [Market capitalization] does not tell what's going on in terms of lines, in terms of minutes, in terms of activity on the ground" (id. at 519). Verizon argues that even when a firm leaves the market via bankruptcy with an asset sale, the capacity of that firm and the firm's ability to apply competitive pressure does not leave the market, but rather the capacity is transferred to another firm when the successor firm buys the assets or the customer base of the bankrupt company (id. at 508). Verizon argues that the actual number of competing firms in Massachusetts that have declared bankruptcy is irrelevant to the economic analysis of a competitive marketplace because supply elasticity is high (Tr. 2, at 346-347).

(ii) CLECs

AT&T and Network Plus contend that a CLEC's ability to expand is greatly hindered by the decline in market capitalization that has occurred over the past year (Tr. 4, at 634-635; Tr. 1, at 67-68). Network Plus argues that if CLECs do not have adequate financing, then

Verizon can increase its prices without instigating a supply response from CLECs because CLECs will not have the finances to increase their supply (Tr. 1, at 37-38). Network Plus further argues that market capitalization for the CLEC industry as a whole has fallen more than the NASDAQ, the Standard and Poor's Index, and the ILEC industry (Exh. NP-2). This indicates, argues Network Plus, that investors have a dim view of the prospects for CLECs (Tr. 1, at 69). Network Plus also argues that the "ability to leverage yourself in the marketplace," as measured by total telecommunications market capitalization, is increasing for ILECs, which indicates that the ILECs' market power relative to other players (i.e., CLECs) is increasing, not decreasing (id. at 25). Network Plus concludes that the decline in market capitalization shows that the market is not sufficiently open to competition (Exh. NP-1, at 5).

AT&T argues that Verizon's claim that other firms buy a bankrupt company's assets, and, thus, retain the competitive pressure of the bankrupt firm in the marketplace, is incorrect (AT&T Brief at 48). AT&T states that the assets of bankrupt firms are not likely to be redeployed in the market because the technology is often "obsolete" and that upgrading the existing technology would be too expensive (Tr. 4, at 632). In addition, AT&T claims that new entrants will not enter a room [market] that is "littered with dead bodies" [bankrupt CLECs and CLEC equipment] (AT&T Reply Brief at 3 n.2). However, AT&T does acknowledge that some firms leave the market as a result of the "natural evolution of the business cycle" (Tr. 4, at 631).

(iii) Attorney General

The Attorney General concurs with AT&T and Network Plus that the overall decline in CLEC market capitalization lowers CLEC supply elasticity (AG Brief at 16-18). The Attorney General asserts that 31 firms providing service in Massachusetts have declared bankruptcy, including Network Plus, an active party in this proceeding, and concludes from this that CLEC supply elasticity is low because "CLECs in bankruptcy tend to scale back operations, drop existing customers and focus on assets that can be sold off" (id. at 15). The Attorney General points to two current Department proceedings concerning telecommunications bankruptcy issues and the transfer of assets, Broadview Networks, D.T.E. 02-14, and Network Plus, D.T.E. 02-15 (AG Reply Brief at 5). These Department proceedings, argues the Attorney General, "demonstrate that CLEC customers and CLEC assets dissipate" or "flow" to Verizon, eliminating the competitive pressure on Verizon's prices (id.). The Attorney General also argues that Verizon has presented no evidence showing that a bankrupt CLEC's assets or customers have been transferred to another CLEC, and, thus, were still providing competitive pressure on Verizon (id.).

b. Resale

(i) Verizon

Verizon contends that the resale discount provides competitive discipline by allowing CLECs to purchase wholesale services below Verizon's retail price even if that retail price is below cost or indeed has no relation to costs whatsoever (Tr. 3, at 510-511). Verizon asserts that the resale price floor protects CLECs from price squeezes (id.). Verizon argues that if it were to lower its retail rates below the UNE rates, thus making UNEs an unprofitable way to serve customers, CLECs could continue to serve those customers using resold lines, which would be provided at 25 percent or 29.5 percent below Verizon's retail rate (id.).[32] By switching to resale, Verizon argues, CLECs using UNEs would not be driven out of the market (id. at 510, 525).

Verizon also argues that a CLEC can move from using UNEs to resale with little or no cost (id. at 525). Verizon asserts that when a CLEC becomes a reseller after providing service through UNEs, certain changes occur in Verizon's OSS system, but the CLEC does not have to exit the market and re-enter as a reseller (id. at 524). Verizon argues that even if a CLEC

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32 Resale discounts were established in Consolidated Arbitrations, D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94-Phase 2 (1996); and made permanent in Bell Atlantic Resale Tariff, D.T.E. 98-15 (Phase II) (1999). The resale discount is currently subject to an open Department investigation, D.T.E. 01-20 Part B, which is currently on hold pending an FCC ruling on the remand of its resale cost methodology. Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Pricing, based upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts' Resale Services in the Commonwealth of Massachusetts, D.T.E. 01-20, at 15, Interlocutory Order on Part B Motions (April 4, 2001).

moving to resale owns part of the facilities, and those facilities, due to the switch to resale, become redundant (i.e., sunk costs), that is not a barrier to exit because Verizon would bear the same sunk costs if Verizon itself no longer needed facilities (id. at 524-526).

(ii) CLECs

AT&T and Network Plus contend that CLECs providing resold services do not provide adequate competitive discipline to restrain any market power that Verizon might have (Exhs. NP-1, at 5; ATT-2, at 16). Network Plus argues that resellers have only a small margin to undercut Verizon's prices because their costs include their own marketing, billing, and customer service costs on top of the avoided cost discount for the service; thus, a reseller's ability to drive prices down is limited (Exh. NP-1, at 11). Network Plus argues that, because the resale discount floats with Verizon's price, it may be easier for resellers to make a profit if there is a retail price hike by Verizon; however, much of the cost of providing service is still fixed so there is "very little to bring [Verizon's] rates back down" (Tr. 1, at 56).

Moreover, Network Plus argues that Verizon's data on collocation, resellers, and UNE-P providers show that the CLEC industry in Massachusetts is still largely dependent on Verizon's network (Tr. 1, at 19-20). AT&T argues that highly concentrated markets are more likely to "move [retail prices] in lockstep" when the upstream costs are controlled by a vertically integrated firm such as Verizon, and when the products cannot be differentiated, as with resale and UNE-P (Tr. 4, at 611-613). In addition, Network Plus argues that some services and combinations of services are not available as resold services thus limiting the competitive offerings that CLECs can make using the resale option (Exh. NP-1, at 11).

(iii) Attorney General

The Attorney General argues that the Department should not consider the number of resellers as evidence of strong competition in Massachusetts (AG Brief at 17). The Attorney General asserts that resellers have "at best, a minimal impact on the level of competition because the resale rates are tied to Verizon's retail rates" (id. at 18). Moreover, the Attorney General argues that Verizon "controls" the wholesale market, unlike AT&T in the Department's evaluation of sufficient competition for AT&T's services in D.P.U. 91-79 (id.).

c. UNE-Based Providers

(i) Verizon

Verizon argues that it could not decrease prices below cost and thereby drive CLECs who provide service using UNEs out of the market for two reasons (Tr. 3, at 508-511). First, Verizon argues that there is a price floor provided by the resale discount which any CLEC could use to undercut Verizon's prices (id. at 511). This price floor, asserts Verizon, prevents it from driving competitors out of the market by decreasing prices below costs (id. at 508-510). Second, argues Verizon, it would not be able to recoup the losses that it incurs from pricing below cost because as soon as Verizon increased prices again, CLECs could enter the market via UNEs or resold lines, which would drive prices down to competitive levels (id. at 508-509). In addition, Verizon argues that when retail prices fall, it is always harder for firms to compete; thus, less efficient firms would be driven out of the market, but resale would still allow entry of efficient firms (id. at 511-512).

(ii) CLECs

AT&T and Network Plus both argue that allowing downward pricing flexibility for Verizon will harm UNE-based competition. Network Plus states that allowing Verizon to move its retail rates freely is "no different than asking for pricing flexibility for [wholesale] UNE rates" (Tr. 1, at 20). Network Plus asserts that because UNE rates are fixed for CLECs, Verizon could lower its retail rates and squeeze the CLECs' profit margins (Exh. NP-1, at 10-11). CLEC profit margins are crucial, argues Network Plus, because competition thrives or withers as profit margins increase or decrease (Tr. 1, at 19).

Both AT&T and Network Plus assert that Verizon, through cross-subsidization, could make up any profits that it might lose from anti-competitive downward pricing (Exh. DTE-ATT-2-4; Tr. 1, at 39). AT&T discusses the high price of access charges as one example of a monopoly rent[33] which gives Verizon supra-competitive profits that Verizon can use to subsidize other services (Exhs. ATT-1, at 42; DTE-ATT-2-4). Network Plus asserts that, under Verizon's proposal, Verizon would have the ability to raise rates in a less-competitive region while lowering rates anti-competitively in a more competitive region (Tr. 1, at 39).

In response to Verizon's claims that the resale price floor provides adequate protection for CLECs in the event of anti-competitive downward pricing, AT&T argues that it is not easy to move from UNEs to resale when a CLEC has invested money in facilities and cannot abandon that investment easily (Tr. 4, at 704-705). AT&T argues that once a CLEC fails at

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33 A monopoly rent is an amount paid in excess of the minimum amount necessary to retain the input in its present use. See e.g., Salvatore at 422. In this instance, a monopoly rent would be any price charged by Verizon that is above economic cost.

competing in the telecommunications market that company will not return (id. at 578). Network Plus argues that while Verizon should align retail prices with their underlying costs, Verizon should not price below cost; therefore, the Department should design a regulatory plan that requires Verizon to align prices with costs (Tr. 1, at 30). AT&T and Network Plus also agree that full-facilities-based carriers are not as vulnerable to price squeezes and non-price discrimination, and that they can offer differentiated products; therefore, facilities-based CLECs provide the most competitive discipline to Verizon (Exh. NP-1, at 15; Tr. 4, at 615).

(iii) Attorn ey Genera l

The Attorney General argues that not only could geographic cross-subsidization occur if the Department granted Verizon pricing flexibility, but Verizon would be able to cross-subsidize its retail services by its wholesale services as a result of Verizon's monopoly in wholesale services (Tr. 1, at 110). In addition, the Attorney General warns against the potential for Verizon to use fixed residential service prices to subsidize its decreasing business service prices (id. at 111).

4. Analysis and Findings

The Department finds that the record evidence in this proceeding shows that, overall, the supply elasticity for CLECs for retail business services is moderately high. More particularly, the Department finds that for resellers, and UNE-P and UNE-loop ("UNE-L") providers, supply elasticity is high; for other facilities-based CLECs, it is lower. If, under pricing flexibility, Verizon were to attempt to raise prices, market conditions for resellers and UNE-P providers with respect to most Verizon services are such that they could immediately put forth a competitive response that would force Verizon to lower its prices or suffer competitive losses. For certain Verizon retail services – mainly private line services – the Department finds that the CLEC supply elasticity is lower and, as a result, CLECs could not be expected to have the same controlling effect on prices for these services. Therefore, as discussed more fully below in Section V.B.4.a.(ii), special access services (the wholesale input that CLECs purchase to compete with Verizon's retail private line services) shall be priced in the same manner as UNEs, i.e., incremental cost plus a reasonable mark-up for indirect costs.

As we stated above in Section V.B.1, supply elasticity refers to the ability and willingness of competitors to increase or decrease their output of a service in response to a price change by another competitor. If there is a high supply elasticity in a given market, for example, an increase in price by one competitor above economically efficient levels would be met by an increase in output by other competitors (i.e., would produce a sufficient competitive response). Conversely, if there is a low supply elasticity, an increase in price by that competitor above economically efficient levels would go unchallenged. Under standard economic theory, a market will have a high elasticity of supply if that market is "contestable," meaning that there are no barriers to entry, expansion, and exit that would prevent competitors (whether actual or potential) from providing a sufficient competitive response to price increases above economically efficient levels. See Salvatore at 371-373. Thus, the Department must determine whether there are any barriers to entry, expansion, and exit in the market for business local exchange services in Massachusetts that would prevent CLECs from providing a sufficient competitive response to Verizon price increases above economically efficient levels.

a. Barriers to Entry[34]

(i) Ease of Entry

The evidence in this case demonstrates that there is ease of entry for CLECs state-wide. The Department's policies implemented since the passage of the Telecommunications Act have removed all structural, legal, regulatory, and economic barriers to entry, as confirmed by the FCC's approval of Verizon's Section 271 application in April 2001, and the Department's conclusion that the Massachusetts market is irreversibly open to competition. See FCC Section 271 Order; DTE Section 271 Evaluation. CLECs can compete and are competing in every wire center across the state with Verizon using any or all three methods of local competition (resale, UNEs, including the UNE Platform, and their own facilities). UNEs, including the UNE Platform, are priced at TELRIC rates, a pricing scheme intended to approximate efficient market-based pricing.[35] Thus, by leasing UNEs, CLECs can enter the market with the same

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34 In antitrust usage, barriers to entry are measures of "[t]he extent to which, in the long run, established firms can elevate their selling prices above the minimal average costs of production and distribution" without "inducing potential entrants to enter the industry." J. Bain, Industrial Organization 252 (1968).

35 In terms of supply elasticity, it is necessary that UNEs be priced on the basis of forward-looking costs. Whether forward-looking costs for UNEs are based on TELRIC or some other forward-looking cost methodology is not significant. Therefore, the Department's conclusions about supply elasticity will not change even if the United States Supreme Court upholds the decision of the United States Court of Appeals for the Eighth Circuit ("Eighth Circuit Court") prohibiting TELRIC because the Eighth Circuit

(continued…)

costs as Verizon (the incumbent firm), one of the two prerequisites for a market to be contestable (the other being costless exit). See Salvatore at 371. As Verizon points out, the ability to lease UNEs allows CLECs to enter the market without the high cost of building their own network facilities and to increase or decrease their supply of telecommunications services at will in response to price changes by Verizon. In addition, CLECs that do not want to invest in their own facilities also have the option of competing with Verizon using resold services, which, although not set at incremental cost like UNEs, are priced based on the avoided cost discount, so that CLECs that are more efficient than Verizon in retailing can compete.[36]

Although Verizon's MCP is evidence of ease of entry and actual competition state-wide, the Department agrees with Verizon that actual competition is significant but it is not as important as the existence of potential competition in controlling Verizon's market power.[37] If

[35](…continued)
Court did affirm that UNEs could be based on forward-looking costs. See Iowa Utils. Board v. FCC, 291 F.3d 644, 752-753 (2000), cert. granted 531 U.S. 1124 (2001) ("We reiterate that a forward-looking cost calculation methodology that is based on the incremental costs that an ILEC actually incurs or will incur in providing the interconnection to its network or the unbundled access to its specific network elements requested by a competitor will produce rates that comply with the statutory requirement of § 252(d)(1) that an ILEC recover its 'cost' of providing the shared items").

[36] As discussed more below, CLECs can exert more downward pressure on Verizon's retail prices through use of UNEs than they can through resold services, since resold services are not priced at incremental cost. Thus, in comparing UNEs to resale, only UNEs represent costless entry in the sense that the CLEC's costs are roughly equivalent to Verizon's. Full-facilities-based CLECs, to the extent their costs are less than Verizon's, can exert the most downward pressure on Verizon's retail rates, but facilities-based providers face barriers to exit, which we discuss below.

[37] The point is not unfamiliar to Department practice, having been argued over a decade ago. In an earlier case, it was AT&T itself that argued that potential competitors
(continued…)

Verizon were to increase its prices above reasonable levels, CLECs could enter the market through UNEs at the same cost as Verizon and drive prices down to their economically efficient levels.

(ii) Price Barriers to Entry

As noted above, CLECs regard the pricing of special access and switched access as price barriers to entry. In its proposed Plan, Verizon is seeking pricing flexibility for analog and digital private line services, which are the retail equivalent of the wholesale special access services that CLECs purchase from Verizon (See Exh. VZ-1, Att. A). CLECs argue that special access pricing is a barrier to entry for CLECs that want to compete against Verizon's retail private line services because special access services impose higher costs on CLECs than are imposed on Verizon. The Department agrees. CLECs that seek to provide services in competition with Verizon's retail private line services incur economically-inefficient wholesale costs since the wholesale inputs (special access services) that the CLECs purchase are not priced at incremental cost; rather, these inputs, because of historical universal service policies,[38] are priced well above incremental cost. The record shows that because there is a significant cost differential between Verizon's wholesale costs and potential entrants' wholesale costs, entrants may have difficulty exerting downward competitive pressure on Verizon's retail rates if

[37](…continued)
contribute to a high elasticity of supply for competing firms. See D.P.U. 91-79, at 22.

[38] See e.g., New England Telephone and Telegraph Co., D.P.U. 93-125, at 4 (1994).

Verizon raises retail prices above economically efficient levels (see Exh. ATT-2, at 11).[39] Contrary to Verizon's claims, the resale of its private line services does not correct this problem. Resellers cannot exert sufficient competitive pressure to push prices down to economically efficient levels because a reseller's cost floor is tied to Verizon's retail price. Moreover, Verizon has not adequately supported its claim that the special access market is competitive on a state-wide basis. Therefore, the Department concludes that the supply elasticity for private line services (Verizon's retail and CLECs' special access services) has not been proven to be high enough to permit granting Verizon's request.

Given this conclusion, the Department will price intrastate special access services in the same manner as UNEs (i.e., incremental cost plus a reasonable mark-up for indirect costs) before allowing Verizon upward pricing flexibility for analog and digital private line services. Pricing special access services at UNE levels will best promote competition, protect consumers, and promote innovation in the market by enabling CLECs to better compete, thereby allowing market forces to control retail prices and service offerings.

With respect to AT&T's argument that above-cost switched access charges limit competition in the local exchange market, the Department notes that Verizon is not seeking a finding of "sufficient competition" for switched access service in this phase. Nonetheless, we agree with AT&T, so the Department will reduce switched access charges to their economically efficient levels in Phase II of this proceeding to promote economic efficiency and competition

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39 Our analysis applies equally to all Verizon retail services that are not contestable on a UNE basis. The Department instructs Verizon to identify in its Phase II filing, those retail business services, in addition to private line services, if any, that are not contestable on a UNE basis.

for intrastate toll, as we did in the past through the rate-rebalancing process. Currently, intrastate switched access charges are higher than interstate switched access charges. This creates a situation where it could cost more for Massachusetts customers to make a call across the state than it does to make a call across the country. The Department concludes that this is inefficient because the cost to Verizon of originating or terminating a toll call does not vary with the distance of the call. Therefore, intrastate switched access charges will be lowered to the more cost-based interstate levels. One consequence of this reduction and the reduction in special access rates is that the revenues from access services that used to subsidize residential dial-tone rates must be made up by increasing residential dial-tone rates, but experience has shown that such rate-rebalancing enhances efficiency without negatively impacting universal service. See New England Telephone and Telegraph Co., D.P.U. 93-125 (1994).

Lowering all wholesale service rates closer to incremental cost improves efficiency, promotes competition, and creates a consistent economic framework for all wholesale services. Certain wholesale services (e.g., switched access, special access, PAL, and collocation) in Massachusetts pre-dated the Telecommunications Act, and there is no state or federal legal requirement for these wholesale services to be treated the same as wholesale services created as a result of the Telecommunications Act, such as UNEs. However, we judge that consistent regulatory policy for all wholesale services, whether they pre-dated the Telecommunications Act or were created as a result of it, will promote competition and administrative efficiency by pricing all wholesale inputs at more efficient levels.[40]

[40] For additional discussion of PAL, PASL, collocation, and special construction services, (continued…)

(iii) Non-Price Barriers to Entry

As stated above, CLECs argue that Verizon's "unreasonable" provisioning of wholesale services constitutes a product differentiation barrier in the retail market, since consumers are unwilling to purchase services from CLECs if the quality of those services is below the quality of Verizon's services. The Department agrees with Verizon that wholesale provisioning does not significantly decrease the supply elasticity of CLECs because there are regulatory mechanisms in place to protect CLECs.

The Department acknowledges that, as a vertically integrated firm, Verizon has an incentive to discriminate in the provisioning and maintenance of wholesale services. For this reason the Department has created the "Rocket Docket" to resolve inter-carrier disputes,[41] established performance measures and penalties in Consolidated Arbitrations, adopted the PAP, begun the auditing process for the PAP, and opened an investigation into Verizon's provisioning of special access services. See Special Access Services Investigation, D.T.E. 01-34, Vote and Order to Open Investigation (March 14, 2001); Order Adopting PAP. Notwithstanding the Attorney General's and AT&T's arguments, the Department found in D.T.E. 99-271 that the PAP gave sufficient incentive to Verizon to promote reasonable provisioning to CLECs and to ensure provisioning at parity with its retail services. And the PAP audit is not meant to reveal whether the PAP penalties are adequate, as the Attorney

[40](…continued)
see Section V.E., below.

[41] See Accelerated Docket for Disputes Involving Competing Telecommunications Carriers, 220 C.M.R. §§ 15.00 et seq.

General suggests, but to determine whether Verizon's data collection, calculation, and reporting are accurate. The adequacy of the penalties and the formula that leads to them are already adjudicated. See Order Adopting PAP at 22-35.

In addition, the Department is investigating allegations of unreasonable provisioning of special access services, but no findings have been made. If that investigation should reveal that Verizon is providing unreasonable provisioning of intrastate wholesale special access services to CLECs, the Department has the means to remedy any such substandard performance by instituting a penalty mechanism similar to the PAP to give incentives for Verizon to improve its service, among other things. Accordingly, given the remedies at its disposal, the Department determines that wholesale provisioning problems do not constitute a non-price barrier to entry.

b. Barriers to Expansion and Exit

Having determined that there are no barriers to entry (as that term is understood in antitrust analysis) for most of Verizon's retail business services, the Department must examine the second part of the contestability equation: whether CLECs face barriers to expansion and exit, since contestability theory also requires that exit be costless, that is, without sunk costs. See Salvatore at 371. The evidence demonstrates that exit is without cost for CLECs that have not invested in facilities, such as resellers and UNE-P providers (see Tr. 4, at 706; Tr. 3, at 525).

The situation is different for CLECs that have invested in facilities. For example, for a CLEC that leases a UNE-loop and has its own switch, the loop lease can be ended without cost but the switch remains a sunk cost (Tr. 4, at 705; Tr. 3, at 526). Verizon argues that unused facilities are sunk costs for both Verizon and the CLECs equally, and, thus, are not a barrier to exit; moreover, Verizon indicates that switches are not sunk costs in the same way as loops (Tr. 3, at 524-526).

The Department determines that sunk costs from an investment in facilities such as loops will prevent the "hit and run" entry of new firms that makes markets fully contestable by facilities-based providers. That is, if firms cannot exit a market without incurring sunk costs, then they will not enter to take advantage of transitory profits because the firm would lose money upon exiting the market (Tr. 4, at 705).

However, the cost of some equipment can be recovered by moving it from a wire center that is no longer being served and redeploying that equipment in a new location where the CLEC is serving customers. UNE-loop providers are able to recoup the sunk costs of a switch by moving that switch to another geographic market; likewise, the costs of collocation equipment can be recovered by moving that equipment to a different collocation cage.[42] The redeployment of equipment means that the cost of that equipment is not sunk, making exit from the market costless.[43] Consequently, the Department finds that UNE-L providers, unlike other facilities-based CLECs, do not face barriers to exit.

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42 However, the Department finds that, while possible, it is unlikely that the cost of loops themselves could be recovered because loops are typically not capable of being relocated and redeployed.

43 Indeed, the Department's recent experience with bankrupt carriers and lienors of their switching equipment illustrates this very effect. See Broadview Networks, D.T.E. 02-14-A at 6-9 (2002).

With respect to the arguments concerning declining CLEC market capitalization, the Department concurs with Verizon that the decline in the number of competitors and the rash of bankruptcies among Massachusetts CLECs in the past year does not indicate that the market is less competitive. While the number of CLECs in the market may be declining, the record does not show that fewer competitors means less competition. For example, overall CLEC market share increased in 2001 (see RR-DTE-2A), even though there was a decline in CLEC market capitalization and a number of CLEC bankruptcies in 2001.

c. Conclusions

Based on the above analysis, the Department concludes that for resellers, UNE-P, and UNE-L providers, the supply elasticity of the business local exchange market (except for private line services) is high and that the market is contestable. However, the Department also concludes that full and partial-facilities-based providers, that use their own loops, do not operate in a contestable market and have a less elastic supply. In addition, the Department concludes that, although the availability of resale and UNEs contributes positively to CLEC supply elasticity, resale and UNEs do not provide the same competitive discipline on Verizon's retail rates as does full-facilities-based entry.

Resellers and UNE-based CLECs (including UNE-P and UNE-L providers) exert less competitive pressure on Verizon's retail rates than full-facilities-based competitors because such competitors are dependent on Verizon's facilities. Because the resale discount (and thus the reseller's cost) is tied to Verizon's retail rates, the reseller's cost floor rises when Verizon's retail rates rise, which limits a reseller's ability to exert downward pressure on prices.

However, the resale discount does help prevent Verizon from setting rates significantly below cost, because resellers receive a discount of either 25 percent or 29.5 percent off the retail rate. In addition, resale does provide some marginal degree of discipline on Verizon because if Verizon increases its retail price, the absolute margin between Verizon's retail price and its resale price will increase, allowing a reseller that provides retail functions at the same cost as Verizon to either extract above-normal profits (by increasing their retail prices) or increase market share (by keeping their retail prices fixed) (Exh. DTE-VZ-1-12).

UNE-based CLECs also face a cost floor (i.e., the respective UNE rate(s)) below which they cannot price. UNE prices are not based on Verizon's retail rates, and so UNE-based CLECs do not limit Verizon's ability to set retail rates below cost, although they can provide sufficient competitive pressure to bring prices down from supra-competitive levels. Although the competitive pressure applied by resellers and UNE-based providers, especially UNE-P providers, is constrained somewhat by their dependence on Verizon's network and their limited ability (compared to full-facilities-based providers) to control costs and offer new services through innovation, resale and UNEs provide methods of quickly expanding into new geographic and product markets, thus increasing the supply elasticity of CLECs in Massachusetts. UNE-L providers, however, do provide more downward pricing pressure since they are less dependent on Verizon's facilities than UNE-P providers. Later in this Order, we will discuss the implications of having supply elasticity that significantly limits Verizon's ability to price at supra-competitive levels, but not necessarily at levels below cost.

C. Market Share

1. Introduction

The Department has stated that a high, output-based, market share[44] indicates significant market power only when the supply elasticity of other firms is relatively low. See D.P.U. 91-79, at 32 (1992). Market share demonstrates the structure of the market at a specific point in time, and often is a reflection of prior regulatory policies. See id. at 22. For the reasons stated in our discussion of the relevant product and geographic markets, our analysis of market share will focus on a state-wide relevant market for all of Verizon's business services (see Section V.A.3, above).

In this proceeding, the Department bases its analysis of market share on the relative number of access lines being served by Verizon and by its competitors. In support of its proposal for pricing flexibility, Verizon assembled the Massachusetts Competitive Profile ("MCP"), which includes both Verizon retail line counts and CLEC line counts in the categories of Resale, UNE-P, and E911. Verizon counted its competitors' facilities-based lines through use of the Verizon-administered Massachusetts E911 database.[45] The E911 database includes full-facilities lines (i.e., facilities of carriers other than Verizon), special access lines,

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[44] Output-based market share is a market share that is measured based on minutes of use, number of lines, or some other product, as opposed to using revenues as the measurement.

[45] The Enhanced 911 (E911) or ALISA database (Automatic Location Information Switching Adjunct) was created to assist emergency operators. All phone numbers within the state are submitted to the database with an address so that the location of the call can automatically be traced (see Exh. AG-VZ-2-5).

and UNE-loops (Tr. 2, at 209). The MCP contains data for every wire center in Massachusetts and contains a list of Verizon's competitors and what services they offer.[46]

2. Position of the Parties

a. Verizon

Verizon argues that market share is not an important factor in the Department's analysis in this case because the barriers to CLEC entry are so low (VZ Brief at 12). Nevertheless, argues Verizon, it has provided the MCP, which contains data that show compelling evidence of competitive entry and low barriers to entry in Massachusetts (id. at 11-12). Verizon asserts that the MCP shows "every active competitor" in Massachusetts (Exh. VZ-3A, Att. 1, Intro). Verizon notes that it did not verify the information contained in Sections B and C of the MCP, and Verizon states that the MCP "makes no assumption as to the types of services a specific collocator may be providing" and "Verizon MA does not know (and, thus, can not quantify) the specific services that CLECs are actually providing" (Exh. DTE-VZ-4-16).

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46 Verizon's MCP contains three sections. The first section contains the percent and number of business and residential lines in each wire center disaggregated by Verizon Retail, Resale, UNE-P, and E911, and aggregated into "total competitive [lines]" and "total competitive market share (in percent)" (Exh. VZ-3A, Att. 1, Section A). The resale line count was obtained from Verizon's resale billing records (Exh. VZ-3A, Att. 1, Intro). The UNE-P line count was obtained from the access line database at each central office, and the E911 line count was derived from CLEC listings in the E911 database (id.). The second section contains a matrix for each wire center that shows the line counts and percentages from Section A disaggregated by carrier and the services provided by each carrier listed in the third section (id. at Section B). The third section of the MCP contains a profile of each carrier listed in the MCP and the services the carrier states they provide (id. at Section C). The information in Section C was taken from competing carriers' tariffs and websites (Exh. DTE-VZ-4-16).

Verizon asserts that as of January 2001, every wire center had "at least two of the three modes of CLEC entry . . . already in use" (VZ Brief at 11). Verizon also argues that the updated Section A of the MCP (RR-DTE-2A) shows that competitors are "migrating from one method of entry (resale) to a broader method of entry (CLEC-switched)" (id. at 13). Verizon asserts that the number of resold lines decreased from January 2001 to November 2001, while the number of UNE-P lines and CLEC-switched lines increased (id.).

Verizon asserts that these data show that "CLECs are not simply relying upon Verizon MA via resale or UNE-P to serve their customers but, as noted above, have invested significant sums in competing facilities in Massachusetts" (id. at 18). Verizon points out that many companies have built their own fiber facilities and that there is an increasing number of competitors who have taken advantage of collocation throughout Verizon's wire centers (id. at 19). Verizon asserts that, as of January 2001, competitors such as RCN, AT&T Broadband, and Broadview had deployed at least 48 local switches (id. at 16).

In addition to wire center-specific data, Verizon disaggregates business lines by four density zones: metropolitan, urban, suburban, and rural.[47] Verizon asserts that its principal competition for business customers is found in the metropolitan and urban zones, but there is still a substantial degree of competition in the suburban and rural zones (see id. at 14). Verizon argues that "[c]ompetitive providers are present and serving customers throughout the state and competitors' lines are growing as Verizon MA's retail lines are declining" (id. at 15).

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47 See Exh. AG-23 (Verizon's M.D.T.E. Tariff No. 17, at Part A, Section 5.1).

Verizon asserts that at least one CLEC is offering service in every wire center in Massachusetts, further, that such widespread CLEC presence is evidence of both actual competition and potential competition. Verizon maintains that the current level of CLEC market penetration indicates that entry barriers are low enough for additional CLECs to enter the market rapidly (id. at 11-12). Verizon argues that even if there were no actual competition, it would not price above competitive levels because potential competitors would enter the market and take market share away from Verizon (id. at 10). In addition, Verizon argues that AT&T's suggested method of evaluating market share is inapplicable in this case, because AT&T's analysis requires that market share be analyzed at the "profit-maximizing price and output levels," neither of which exist in a regulated market (Exh. DTE-VZ-4-8).

Verizon argues that the E911 database is the most accurate method for estimating competitors' facilities-based lines (VZ Brief at 24). Verizon acknowledges that even though there may be some discrepancies in the data, there is no better basis available for estimating lines (Tr. 3, at 434). Verizon further states, "[a]though Verizon MA's estimate is reasonable, [determining] the precise number [of competitors' lines] is not significant" (VZ Brief at 24). Verizon states that the estimate of competitive lines is intended to demonstrate that there is significant facilities-based competition; a steadily-increasing number of competitive lines; and low entry barriers as evidenced by the level of competitive activity (id.).

Verizon criticizes AT&T's attempt to call into question the E911 data because of what AT&T claims are discrepancies in the amount of ported numbers (Exh. VZ-8, at 3-6). Verizon states that the number of lines that are actually affected by the dispute over how ported numbers are counted in the E911 database is de minimis (id. at 6). While AT&T argues that the number of CLEC lines is overstated, Verizon argues that the opposite is true (id.). Verizon argues that because Verizon reports both "inward and outward PBX trunk, all Centrex lines, and all 800 lines," and "CLECs are not required to include inward only services in the E911 database," there is a greater potential to understate competitor lines in the E911 database (id. at 3). Verizon asserts that "while the [MCP] results could be somewhat different, the issue raised by AT&T is insignificant and would not affect the conclusions that can be drawn from the data" (VZ Brief at 25). Verizon argues, in effect, that precision is unachievable, and, even if achievable, would not significantly improve the already sufficient basis for deciding the question.

b. CLECs

AT&T argues that market share is an important factor in evaluating whether or not there is sufficient competition and contends that barriers to entry, expansion, and exit in Massachusetts are high (AT&T Brief at 41). AT&T argues that "[m]arket share is relevant to the magnitude of market power because, holding all other factors constant, higher market shares give the firm greater control over price" (Exh. ATT-1, at 22). AT&T also argues that 90% market share is typically seen as "sufficient for unilateral monopolistic exploitation" and shares of 5 percent to 50 percent are insufficient to exploit market power (id. at 23). AT&T asserts that a "calculated 'market share' of something that is not a [properly defined] market is not a 'market share' within the bona fide market power inquiry" (id. at 23 n.16).

AT&T argues that the E911 database cannot be used as an estimate of full-facilities-based competition, because the E911 database includes CLEC lines provisioned over Verizon special access facilities and UNE-loops (AT&T Brief at 18). AT&T states that "Verizon's use of the E911 database to calculate CLEC's retail lines while using its internal data to calculate Verizon retail lines makes its retail market share calculation flawed and unreliable" (id. at 20). AT&T argues that Verizon makes erroneous assumptions in its interpretation of the data in the E911 database (id.). AT&T claims that one flawed assumption concerns the way that "lines" are defined and counted (id.). According to AT&T, a business with one T1 loop (itself containing 24 voice grade channels) and one main business line might have as few as 24 or as many as 500 employees, each with his own phone number, and the resulting number of "lines" for that business could be one, 24, or 500 (id.).

AT&T asserts that theE911 database does not deliver an accurate number since all companies, including Verizon, report differently to the database (Exh. ATT-5, at 3-5). AT&T asserts that Verizon only reports the lead number while AT&T reports all the numbers into the database (id. at 5). AT&T argues that, as a result, the "E911 database may overcount and it may undercount lines" (id. at 7). AT&T asserts that there is no way of knowing exactly how CLECs report their lines to the E911 database, or whether the count in the E911 database bears any relation to the manner in which Verizon counts its own retail lines (AT&T Brief at 19-21). AT&T also asserts that the E911 database itself was never meant to be a tool to estimate line count; therefore, it should not be used for that purpose (id. at 22).

AT&T suggests instead that the Department use Exh. ATT-31 (May 2001 FCC Report: Local Telephone Competition Status as of December 31, 2000 ("FCC Report")) to determine line count (Exh. ATT-5, at 8). According to AT&T, the FCC Report indicates a far smaller number of CLEC access lines than Verizon's MCP (id.). AT&T argues that the FCC Report is the only "apples-to-apples" comparison of ILEC and CLEC access lines (id.). AT&T argues that, unlike the E911 database, the FCC Report applies strict, uniform procedures for counting lines and is therefore much more reliable (Tr. 4, at 688). AT&T argues that the presence of only eleven Massachusetts CLECs in the FCC Report proves that only eleven CLECs are actually offering any real competition to Verizon, while the rest are just potential competitors (id.).

AT&T argues that Verizon did not rebut AT&T's evidence that carriers listed in the MCP often were "not present at all [in the exchange listed] or [did] not provide local business services" (AT&T Reply Brief at 12). AT&T also argues that facilities-based providers are not present in every wire center in Massachusetts (AT&T Brief at 18). AT&T asserts that, based on the FCC Report, nationally only 35% of CLEC lines are full-facilities-based (Tr. 4, at 692).

Network Plus stresses the importance of having facilities-based competitors because "[n]ow, much of the competition, as Verizon itself points out, is critically dependent on Verizon's facilities" (Tr. 1, at 19). Networks Plus asserts that since Verizon's competitors are dependent on Verizon's wholesale equipment, the competition is extremely weak and vulnerable, and does not offer strong or economically viable competition to Verizon (id. at 18). AT&T asserts that in order to show sufficient competition, Verizon must prove that there is strong facilities-based competition (AT&T Brief at 16). AT&T argues that "[s]uch a showing must include a demonstration of full-facilities-based competition that is capable of bringing to bear competitive discipline on both the wholesale and retail aspects of Verizon's provision of telecommunications services" (id.). AT&T argues that Verizon has failed to demonstrate that there is such competition (id. at 17).

c. Attorney General

The Attorney General asserts that "Verizon still controls a huge share of the local and toll, business and residential markets" (AG Brief at 28). Regardless of Verizon's high market share, the Attorney General admits that "high supply elasticity or demand elasticity in the market could mitigate the impact of this heightened market share figure" (id. at 14). The Attorney General disagrees with Verizon's assessment of the state of competition in Massachusetts, and asserts that the MCP, even in its most recent update, shows CLECs have a "very low presence in nearly all wire centers" (id. at 11). The Attorney General argues that "if Verizon's market share for much of the state were reduced to 60% and if the 40% CLEC market share were full-facilities-based . . . ," then the Department perhaps could find that there is sufficient competition for pricing flexibility (id. at 13). The Attorney General asserts that while Verizon's market share is at or below the 60% level for business services, this is not true for all 273 wire centers in Massachusetts (id.).

The Attorney General argues that use of the E911 database "is not a reliable indicator of competition in the market" (AG Reply Brief at 6). The Attorney General also argues that the E911 database is misleading due to the fact that there is no clear way to "count" a T1, and that the line count for a T1 could be anywhere from one line to 300 lines (Exh. AG-1, at 42). The Attorney General argues that the only way to conduct an accurate count of lines would be for CLECs to provide the numbers to the Department themselves, and not rely on Verizon's calculations (id. at 46).

The Attorney General criticizes Verizon's repeated use in the MCP of the term "actual competition," and states that the MCP represents only potential, not actual, competition (AG Brief at 15). According to the Attorney General, the MCP lists competitors who are registered to do business in Massachusetts, but do not actually provide service (id.). The Attorney General argues that the MCP lists companies that have filed for bankruptcy and that do not even receive revenues from Massachusetts operations (id.). The Attorney General asserts that not all CLECs listed in the MCP provide the same services, and states that "many are niche players who specialize in small portions of the . . . business [market]" (id. at 16). The Attorney General argues that unverified CLEC tariffs and questionable E911 data cannot be relied upon to provide evidence of sufficient competition for pricing flexibility for all business services in all wire centers (id.).

The Attorney General also argues that since there are very few fully facilities-based competitors in Massachusetts, there is very little actual competition (Exh. AG-1, at 35). The Attorney General argues that "[w]hat is being referred to by the Company as 'facilities-based' competition – is so limited as to offer no consequential economic challenge to VMA's overwhelming dominance and market power" (id.). The Attorney General notes that at least two of the firms that Verizon points to as principal facilities-based providers, Winstar and Teligent, have filed for Chapter 11 bankruptcy protection (id. at 48).

The Attorney General asserts that Verizon is a vertically integrated firm that not only produces the underlying services but also retails the services it produces (id. at 33). The Attorney General gives the example that if Verizon had a 95% share of the retail market, complete control of the wholesale market, and received 75% of total CLEC revenues, it would actually possess 98.75% of the retail market (id. at 36-37) . The Attorney General asserts that this means that even though another carrier may be the one billing the customer, Verizon is still the underlying carrier and receiving part of the customer's payment (id. at 36). The Attorney General asserts that Verizon is therefore relatively "indifferent" to whether it or a competing provider actually furnishes Verizon services to the end-user (id.).

Finally, the Attorney General also highlights the lack of competition in the intrastate toll market (AG Brief at 13). The Attorney General argues that while Verizon did not disaggregate intrastate toll market share at the wire center level, a statewide intraLATA toll market share can be determined from Verizon's IntraLATA Presubscription Tracking Reports from January to October 31, 2001 (id. at 13-14; Exh. AG-VZ-5-7). The Attorney General argues that Verizon reports that CLECs serve 40% of the business toll market as of January 2001, but that Verizon did not show how it calculated these market shares (AG Brief at 14). The Attorney General concludes that Verizon's market share in both the local and toll markets is high enough to allow Verizon to withstand competitive pressures, and that Verizon retains too much market power to be granted full market-based pricing flexibility (id.).

3. Analysis and Findings

In D.P.U. 91-79, although the Department did not adopt a "bright-line" standard for the necessary market share in order to permit market-based pricing flexibility, the Department granted pricing flexibility to AT&T, finding that "AT&T's share of the total market, although still large as measured by minutes of use, has declined significantly in recent years." D.P.U. 91-79, at 32. The Department further noted that "AT&T's . . . market share for various services is at least partially a vestige of AT&T's former status as a monopoly provider of telecommunications services." Id. at 34. Similarly, while the Department finds that Verizon's market share of business lines is large, the record shows that significant CLEC entry and expansion into the business market has occurred, and that Verizon's market share has continued to decrease even during a period of significant turmoil in the telecommunications industry (see RR-DTE-2A).

More importantly, as the Department stated in D.P.U. 91-79, a "high output market share reflects significant market power only when the supply elasticity of other firms is relatively low." Id. at 32. As we have determined above (see Section V.B.4) that the supply elasticity of competing firms in Massachusetts is high, we place less weight on market share as an indicator of market power in our evaluation of sufficient competition. In fact, because of the ease of entry in the Massachusetts business market, actual competition to the extent it is indicated by market share data is not as important as potential competition to constrain Verizon's prices (see Tr. 3, at 483-485). Market share is more important as another indicator of supply elasticity, in that presence of actual competition shows that potential competition is more than just theoretical. For example, if faced with the same supply elasticity conditions, but a CLEC market share of zero, the Department would have to take the potential for competition purely on faith. However, the market share evidence of actual competition, including the presence of CLECs using UNEs in every wire center, can and does give the Department confidence that relatively high supply elasticity has been proven.

As noted above, Verizon recommended that the Department calculate market share using Verizon's MCP and the updated MCP Section A (RR-DTE-2A); AT&T, however, suggested that the Department rely on the FCC Report (Exh. ATT-31). For the reasons discussed below, we determine that the FCC Report is not a reliable indicator of Verizon's market share in Massachusetts, and therefore reject AT&T's suggestion that the FCC Report form the basis of our market share analysis. First, the FCC Report does not fully disaggregate business and residential data.[48] As discussed above, the Department considers the residential and business markets to be properly divisible (see Section V.A.3, above). Second, the FCC Report includes line counts as of year end 2000, and the Department determines that more recent data are required in order to ensure greater accuracy. Third, only eleven CLECs reported data to the FCC, and carriers with under 10,000 subscribers were not required to (and

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[48] In the FCC Report, data are portrayed as "Percentage of ILEC and CLEC Lines Provided to Residential and Small Business Customers" (Exh. ATT-31, at Table 8). By dividing the respective percentages into the number of "End-User Lines by ILEC and CLEC" (id. at Table 6), a calculation of the market share of what the FCC characterizes as "medium and large business, institutional, and government customers" can be obtained. However, because the FCC Report combines residential and small business data, and, therefore, is counter to the market definition that we have deemed is critical to our analysis in this case, we must reject the FCC Report as the foundation for our conclusions on market share.

did not) report any data to the FCC.[49] The Department, therefore, will not base the foundation of our market share analysis upon the FCC Report.

Conversely, Verizon's MCP and RR-DTE-2A do provide a reliable basis for evaluating CLEC competitive activity. Analysis of Verizon's MCP and RR-DTE-2A leads to the following conclusions: that CLECs are competing in every wire center in the state; that all three methods of entry envisioned by the Telecommunications Act (i.e., resale, UNEs, and facilities-based) are active in Massachusetts; and that the CLEC market share of business lines has increased over the past year. In addition, the most recent calculation of Verizon's market share for business services, as reported in RR-DTE-2A, is comparable to the market share of AT&T when we granted AT&T pricing flexibility in D.P.U. 91-79. See D.P.U. 91-79, at 32. These conclusions, while not necessary to our determination of sufficient competition given our findings on supply elasticity, provide additional, corroborative support for granting Verizon's request for pricing flexibility of its retail business services.

Moreover, while AT&T and the Attorney General raised concerns regarding the accuracy of the CLEC facilities-based line counts included in the MCP, the Department does not find that these concerns negate the conclusions we draw regarding the overall extent of competitive activity in Massachusetts for several reasons.[50] No party has questioned the

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49 AT&T's claim that the presence of only eleven CLECs among the Massachusetts data in the FCC Report proves that only eleven CLECs have any competitive significance to the Massachusetts market (Tr. 4, at 688) is overdrawn.

50 CLECs also raised concerns regarding Section C of the MCP, which contains unverified information about CLEC activity drawn from CLEC tariffs and websites. We agree that this section is of less value in an evaluation of competitive activity (continued...)

reliability of the data, drawn from Verizon's internal databases, which demonstrate Verizon's retail line counts and CLEC UNE-P and resale line counts. Without factoring in any CLEC facilities-based lines, this information indicates that there is at least one UNE-P or resale competitor in every wire center in Massachusetts, and that the overwhelming majority of wire centers have both UNE-P and resale competitors. When we do factor in CLEC facilities-based lines, the MCP and RR-DTE-2A indicate that CLEC market share increases significantly, showing that facilities-based providers play a significant role in Massachusetts competitive activity.

Turning to AT&T's criticisms of the facilities-based line counts derived from the E911 database,[51] we do not agree with AT&T that these concerns render the E911 database unreliable as a source of evidence in this proceeding. First, the fact that Verizon cannot separate out full-facilities-based data from the partial-facilities-based data in the E911 database does not detract from its overall value. In essence, Verizon has used the E911 data to show aggregate facilities-based competition, including both partial-facilities-based competition (i.e., CLEC-switched and UNE-loop) and full-facilities-based competition (i.e., CLEC self-provision of facilities). While Verizon does not disaggregate the full-facilities-based lines from the partial-facilities-based lines, this is less important than the fact that both types of competition are active

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[50](…continued)
because information contained in tariffs and websites has less representational value than the actual line counts contained in the original and updated Section A. Section C, however, is relevant and important to our assessment of supply elasticity because it does demonstrate potential competition.

[51] Sections A and B of the MCP, and the updated Section A (RR-DTE-2A) contain E911 data.

in Massachusetts.[52] Second, the effect and extent of any potential inaccuracies that may result from inconsistent reporting by CLECs to the E911 database are merely asserted by AT&T but are not supported by substantial, much less conclusive evidence. AT&T did not provide any evidence of, or suggest a method for calculating, the extent of actual line count inflation it asserts is caused by its practice of reporting all numbers behind a PBX to the database. AT&T merely argued that the potential for such inflation exists. The Department agrees with Verizon that if AT&T wanted to refute effectively the facilities-based line counts based on the E911 database, AT&T could have presented its own internal data to the Department and compared that data to the AT&T data in the E911 database.

Likewise, Verizon provided no conclusive evidence to support a finding that the E911 database actually understates the amount of CLEC facilities-based lines in Massachusetts. Verizon argues that if CLECs followed the industry standard and reported only the lead number behind a PBX, the resulting CLEC line count has the potential to be understated in

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52 To corroborate the presence of both partial and full-facilities-based competition, the Department can look to AT&T's statements about its own activities in Massachusetts. AT&T states, "[t]he primary means by which [AT&T's business] customers are presently served relies in part on AT&T's facilities. AT&T serves a very small number of customers using the UNE-P but this is intended to be only a transitory mechanism. As soon as possible, those customers would be served either entirely through AT&T's own facilities or using Verizon's unbundled loops" (Exh. ATT-6A at 7). This statement indicates that AT&T is a facilities-based competitor, and that AT&T employs both partial and full-facilities-based provisioning. For a rough estimate of the extent of full-facilities-based competition, AT&T suggests that, according to the FCC Report, nationally, 35% of total CLEC lines are full-facilities-based (Exh. ATT-31, at Table 3; Tr. 4, at 692).

comparison to Verizon's own retail line count, because Verizon included all Centrex[53] numbers in its own retail line count (Exh. VZ-8A, at 4 n.3). However, Verizon did not provide any evidence of the actual amount of line count deflation it asserts could be caused by this practice, merely that CLEC line count deflation asserted a mere possibility. In sum, the Department has no substantial evidence that the CLEC facilities-based line counts derived from the E911 database either over or under-state the actual number of CLEC facilities-based business lines in Massachusetts.

The Department determines that, while the E911 database may not provide an exact number of CLEC facilities-based line counts, it does serve the purpose for which it was offered by Verizon – that is, to provide a reasonable estimate of CLEC facilities-based competitive entry. The E911 database evidence reasonably contributes to the overall calculation of market share. The E911 count is fairly indicative, as an evidentiary matter, to support and sustain Verizon's claim. The E911 database is prepared for an independent purpose, which renders it above suspicion of manipulation, and imbues it with indicia of reliability despite its purported shortcomings.

Finally, the Department determines that while market share provides some guidance as to the state of competition at any given time, it is supply elasticity that serves as the most critical test of a market's ability to support competition over the long term. As we have concluded above that supply elasticity is high, any conclusions about present market share are not critical to our analysis of sufficient competition.

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53 Centrex is a telephone service offered by Verizon as an alternative for business customers buying or leasing their own on-premises telephone system, such as a PBX.

D. Demand Elasticity

1. Introduction

Demand elasticity refers to the willingness and ability of a consumer to change the quantity of a good consumed in response to a change in the price of that good (see Exh. AG-1, at 18). In general, the demand elasticity of a good is directly related to the availability of adequate substitutes. Where satisfactory substitutes are available, a rise in the price of a good will cause consumers to shift consumption to the substitute goods. Individual-firm demand elasticity, or the elasticity of demand for a good or service produced by a specific firm, such as Verizon's local exchange service, indicates the responsiveness of consumers to changes in price of that firm's good or service; market demand elasticity, or the elasticity of demand for a category of goods or services, such as local exchange service itself, signals the responsiveness of consumers to changes in price of the entire category.

2. Position of the Parties

a. Verizon

Verizon addresses the individual-firm demand elasticity of the services for which it seeks pricing flexibility by stating that "if Verizon were to attempt to price above the competitive market level, customers would switch suppliers and the attempted price increase would prove not to be profitable" (Exh. VZ-2, at 16). Although Verizon provides no specific evidence that the demand for Verizon's services is relatively elastic, Verizon does specify that the market demand elasticity of basic exchange services is "probably pretty low" due to the absence of good substitutes (Tr. 3, at 472).

b. CLECs

AT&T argues that Verizon fails to address the characteristics of market demand in this proceeding (AT&T Reply Brief at 23). AT&T notes that it performed its own analysis of market demand characteristics in D.P.U. 91-79, and criticizes Verizon for not having presented a similar analysis in this investigation (id. at 24). AT&T argues that it cannot determine whether Verizon's customers are large, small, high-usage, or low-usage on the basis of Verizon's evidence (id.). AT&T asserts that "Verizon's evidence does not show the percent or amount of customers that migrated from Verizon, nor the services Verizon provided to those customers prior to Verizon losing the customer to a CLEC" (id.). AT&T adds that Verizon's evidence does not indicate whether CLECs are serving customers with many or few lines, or "whether CLEC switches are being used to serve only large customers or also small customers" (id.). Finally, AT&T contends that Verizon's evidence neither reveals "whether collocation arrangements are being used for data or business exchange service," nor identifies "the number of business customers being served through collocation arrangements" (id.).

c. Attorney General

The Attorney General defines demand elasticity as "a customer's willingness and/or ability to modify the quantity of a good or service purchased from a given firm in response to a change in that firm's price" (AG Brief at 19). The Attorney General argues that the demand elasticity for local exchange services is low because consumers consider it to be an essential service (Exh. AG-1, at 19). The Attorney General also suggests that this low demand elasticity is partly due to "the provisioning problems CLECs experienced when relying on Verizon's unbundled network elements or resale components" (AG Brief at 19). The Attorney General asserts that the delays in "setting up or maintaining service" that ensue from provisioning problems negatively impact customers' perceptions of CLECs and reduce their "willingness to change providers in the face of a price increase," thereby benefitting Verizon (id.; Tr. 1, at 45-46). The Attorney General also argues that the incumbent firm wields more market power where market demand is low or inelastic (id. at 8).

3. Analysis and Findings

For the following reasons, the Department concludes that even though demand elasticity for basic business exchange service itself is relatively inelastic, because of the lack of close substitutes, nonetheless demand for Verizon's business services is relatively elastic. Verizon is correct in noting that a low firm elasticity of demand should not be inferred from Verizon's admission that the demand for basic exchange services in general is likely to be relatively inelastic (see Tr. 3, at 472). Indeed, the Attorney General notes that for "markets with more than one firm, the price elasticity of demand confronting any one firm will always be greater or equal to the price elasticity of demand for the market as a whole" (Exh. AG-1, at 20). It is reasonable to conclude that the demand for Verizon's own retail local exchange service is relatively elastic in comparison to the elasticity of demand for local exchange service itself, which Verizon estimates as "probably pretty low" (Tr. 3, at 472). In other words, while customers are not likely to change their demand for local exchange service in response to a change in price, they are willing to take their local exchange service from Verizon's competitors.

Because the demand elasticity for basic local exchange service depends on the availability of close substitutes for that service itself, the demand elasticity for basic local exchange service is not altered by the presence or absence of competitive providers of the same service, nor does it affect the ability of carriers to enter the market (see Tr. 3, at 472; Tr. 4, at 725). Therefore, the fact that the demand elasticity for local exchange service may be "pretty low" has no impact on our determination of Verizon's market power and the sufficiency of competition.

Demand elasticity is a necessary component of a market share analysis. No matter how low the barriers to entry are, competition will never gain a foothold if customers are unwilling to purchase service from a competitor of the incumbent. In this instance, Verizon is losing market share to competing providers of telecommunications service (see RR-DTE-2A). Analysis of Verizon's retail line count from the MCP (Exh. VZ-3A, Att. 1) and the updated

MCP Section A (RR-DTE-2A) (see Section V.C.3, above, for an analysis of Verizon's MCP) reveals that the number of Verizon's retail business lines have been declining (Exh. VZ-3A, Att. 1, Sec. A; RR-DTE-2A at 2, 6) while competitive business lines have been increasing in the same period of time (Exh. VZ-3A, Att. 1, Sec. A; RR-DTE-2A at 2, 6) – which trend, given the relative inelastic demand for basic local exchange service in general, indicates that business customers are willing to purchase local exchange services from Verizon's competitors, and, further, that the demand for Verizon's own business services is fairly elastic, despite its position as the incumbent.

E. Conclusions on Sufficiency of Competition

The intent of the FCC's Local Competition Order[54] was to promote a transition to facilities-based competition through unbundling: CLECs would begin serving customers with resold services, then move to UNE-P, then begin to install their own equipment supplemented with UNEs where necessary, and finally build a complete network platform of their own. See Local Competition Order at ¶ 232. Both the FCC's goal of a transition to facilities-based competition and the Department's goal of economic efficiency will be best served by allowing Verizon upward pricing flexibility for those retail business services that CLECs can compete against with their own UNE-based retail services. Competitors will not be harmed by giving Verizon upward pricing flexibility because the supply elasticity for resale and UNEs is high; a competitor can easily enter a market in response to a price increase by Verizon. The ease of

54 Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, et al., CC Docket No. 96-98, First Report and Order, FCC 96-325 (rel. August 8, 1996) ("Local Competition Order").

CLEC entry into a market in response to a price increase will similarly protect end-users from harm because Verizon's attempt to earn monopoly profits from end-users in a relatively under-served part of the state would make it that much more profitable for CLECs to enter that market and begin competing for those end-users.

By contrast, granting Verizon unlimited downward pricing flexibility would enable Verizon to engage in a "price squeeze" with respect to UNE-based CLECs. Verizon would be free to decrease its retail rates to the point where the margin between the market price of a service and the cost of the underlying UNE was "squeezed" until UNE-based CLECs could not profitably compete with Verizon. Allowing such freedom to an incumbent would defeat UNEs' purpose as both a means of providing service and a tool for moving to a facilities-based network. Verizon asserts that UNE-based providers can switch to resale, and the existing resale discount price floor would serve as a "safety net" preventing anti-competitive pricing (Tr. 3, at 508-509). Accepting Verizon's argument on this point would, however, impede the development of facilities-based competition envisioned by the FCC, and, as mentioned above in Section V.B.4, it is not certain that facilities-based CLECs would be willing and able (given sunk costs) to shift quickly to resale.

Although reselling service or building facilities is always an alternative to using UNEs, they are not perfect substitutes because, as noted above, the three methods of entry provide different levels of competitive pressure. Moreover, it is possible that duplicate ubiquitous networks may never be developed by multiple LECs; therefore, the ability to use UNEs as a profitable method of entry and expansion in Massachusetts is important to the development of competition. Consequently, the Department will require a UNE-based price floor for Verizon's business services that are contestable on a UNE basis (see Exh. DTE-ATT-2-5, at n.2). The price floor should be equal to the UNE rates for the elements that make up the retail service, plus a mark-up for Verizon's retailing costs as reflected in the wholesale discount.[55] The price floors will be density-zone-specific.

When Verizon seeks an initial price decrease for any business services, Verizon will be required to file a cost analysis calculating the price floor for those services. As discussed above in Section V.B.4, the Department determined that Verizon will be granted upward pricing flexibility with regard to private line services only after special access services are moved to UNE-based pricing, and, further, that other business services not contestable on a UNE basis will not be granted pricing flexibility.

Based on the record evidence in this proceeding, the Department concludes that there is sufficient competition in the Massachusetts business marketplace to grant Verizon pricing flexibility for its business services. The CLEC share of the business market using resale, UNEs, and facilities-based provisioning is supported by substantial evidence (Exh. VZ-3A; RR-DTE-2A).[56] All three methods of entry are present and providing competitive pressure in the market. Furthermore, while each specific method of entry into the telecommunications market

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55 For this calculation, Verizon shall use the existing resale discount until a new discount level is approved by the Department.

56 Because Verizon is unable to disaggregate the data in the E911 database (see discussion in Section V.C.3, above), the *exact* number of CLEC full-facilities-based lines in Massachusetts is unknown; however, AT&T asserts that, based on the FCC Report, nationally, full-facilities-based CLEC lines represent approximately 35 percent of the total of all CLEC lines (Exh. ATT-31, at Table 3; Tr. 4, at 692).

entails its own costs and benefits (e.g., resale incurs no sunk costs, but also does not allow for innovation), the combination of methods of entry provide sufficient competition to ensure that prices for business services will remain just and reasonable.

The existence of all three methods of entry validates a conclusion that supply elasticity is moderately high: first, because there is evidence that firms have entered the market using all three methods (Exh. VZ-3A; RR-DTE-2A); and second, because the high supply elasticity of resellers and UNE-P providers complements the less elastic supply of partial and full-facilities-based providers. The Department can and will continue to establish and enforce policies that allow CLECs with viable business plans to compete. Moreover, the Department concludes that business customers are responsive to price changes in the telecommunications market, and business customers will switch providers if they can obtain greater value for the same service (i.e., the demand elasticities for Verizon's services are relatively elastic).

Therefore, the Department determines that Verizon may, consistent with G.L. c. 159, be granted upward pricing flexibility for its retail business services that are contestable on a UNE basis, but that such a grant must be subject to a price floor equal to the density zone-specific UNE rates underlying the service plus a mark-up equal to the resale discount percentage. The Department determines that Verizon may, consistent with G.L. c. 159, be granted pricing flexibility with regard to private line services, but only after rates for special access services are moved to UNE-based levels, and, further, that other business services not contestable as UNEs may not be granted pricing flexibility on the basis of the record before us. These determinations build upon the Department's precedents encouraging the development of competitive markets (see e.g., NET–Centrex, D.P.U. 85-275/276/277 (1985); AT&T Communications of New England, Inc., D.P.U. 90-133/90-133-1 (1991); AT&T Alternative Regulation, D.P.U. 91-79 (1992)). Moreover, as the combination of all three methods of competitive entry envisioned by the Telecommunications Act are present and will provide competitive pressure sufficient to push prices down to their economically efficient levels, our grant of pricing flexibility to Verizon for its retail business services is consistent with our statutory mandate under G.L. c. 159 to ensure that rates for telecommunications services in Massachusetts remain just and reasonable.

As part of pricing flexibility for business services, the Department determines that Verizon may geographically deaverage its prices for business services. Accordingly, Verizon could charge different rates for the same service in different areas of the state, to respond to local market conditions and to reflect differences in the cost of serving different areas of the state. As non-dominant carriers, CLECs already have the ability to geographically deaverage rates. Historically, the Department has required Verizon to maintain average rates state-wide for business and residential local exchange services in order to further its telecommunications policy goals of fairness and universal service. However, since we determine that Verizon no longer has market power (in antitrust terms) in the business local exchange market, it is no longer necessary or appropriate to maintain that policy; in fact, it would run counter to our desire to let market forces control pricing where those forces lead to an efficient result not inconsistent with the statutory mandate of just and reasonable rates.[57] The Department believes

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[57] The Department notes that there is historical precedent for allowing the change. The (continued…)

that this additional pricing flexibility will not hurt business customers because actual and potential competition exist state-wide and any attempt by Verizon to raise prices in a less competitive area of the state would be expected to produce a competitive and disciplinary response.

Finally, turning to those wholesale services that we have identified as a separate product market (i.e., PAL, PASL, collocation, and special construction) (see Section V.A.3, above), the Department finds that Verizon's evidence on sufficient competition was limited to its retail services, and did not encompass the supply elasticity, market demand elasticity, or market share relating to these wholesale services.[58] The Department finds that evidence of competition for retail services does not provide any guidance as to the level of competition for wholesale

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[57](…continued)
Department approved different intraLATA toll rates for Verizon for eastern and western Massachusetts in 1990. See New England Telephone and Telegraph Co., D.P.U. 89-300, at 47-51 (1990). Also, the Department does allow Verizon and all other carriers to negotiate and tariff customer-specific pricing arrangements ("CSPs"), and we note that a significant and increasing number of large business customers in Massachusetts receive telecommunications service pursuant to CSPs.

[58] For example, Verizon's MCP did not contain any information on competitive alternatives for these services. Verizon's evidence on competitive collocation options and providers did not show that competitive collocation providers could provide access to the lines in Verizon wire centers, nor did Verizon show that CLECs could use alternative collocation providers to access a vast majority of lines across the state (see Exh. DTE-VZ-4-7). Rather, Verizon's evidence concerned the number of collocation agreements that CLECs had with Verizon (see Exh. DTE-VZ-2-14, citing Exh. VZ-2, at 10). The Department finds that Verizon did not show that there is sufficient competition for collocation services. CLECs cannot gain access to most lines through alternative providers of collocation services; therefore, market demand elasticity for collocation services is low. Consequently, the Department concludes that alternative collocation providers do not provide adequate competitive discipline to control Verizon's pricing for collocation services throughout the state.

services. Therefore, the Department concludes that Verizon has not met its burden of proof with regard to its PAL, PASL, collocation, and special construction services, and these services are excluded from pricing flexibility. There may be additional Verizon services included in its proposed Plan that do not fit the Department's definition of retail services and the exclusion from pricing flexibility applies equally to those services. The Department instructs Verizon to identify in its Phase II filing those additional services, if any, that are primarily provided to other carriers as wholesale services, rather than to end-users as retail services. If there are any such services, Verizon is directed to include in its Phase II filing a proposal for pricing these wholesale services in a UNE-based manner.

The Department has concluded that the objective conditions exist, and likely will strengthen, for imposing a market-pricing discipline on Verizon. Those conditions will result in prices to business customers that are consistent with G.L. c. 159's mandate of just and reasonable rates. Satisfying the statute can be accomplished more efficiently by market forces than by present or conventional regulatory process. Should the situation change and a result equivalent to more conventional regulatory means no longer obtains, Chapter 159 still provides the more conventional means to redress the situation.[59]

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[59] In order to inform ourselves about changes in the competitive situation, the Department hereby requires Verizon to file an annual update to RR-DTE-2A, disaggregated by Verizon retail, resale, UNE-P, UNE-loop, and full-facilities-based lines.

F. Residential Services

1. Introduction

In its April 2001 proposal, Verizon sought different regulatory treatment for its residential services than for its business services (Exh. AG-21, at 1). Instead of market-based pricing flexibility as discussed above for Verizon's business services, Verizon sought revenue neutral pricing for all non-basic residential services and proposed to freeze basic residential services (i.e., Residence Dial Tone Line and local usage rates) for three years (id.). The purpose of this discussion of residential services is to provide some tentative conclusions[60] and guidance as to what may be appropriate in Phase II.

2. Positions of the Parties

a. Verizon

Verizon argues that evidence of competition for residential services provides useful evidence for competition in business services, and vice versa, because the same operations support systems that provide UNEs for business customers are also used to provide UNEs for residential customers (Tr. 2, at 234). Verizon argues that once CLEC switches (or other sunk facilities) are in place, they can be used by CLECs for either residential or business services (id. at 235). Verizon argues that collocation arrangements give CLECs access to 97 percent of Verizon's residence lines (Exh. VZ-1, at 10). Verizon indicates that total competitive residential lines (served through resale, UNE-P, or CLEC switches) have increased through

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60 The use of the term "tentative conclusions" in this context is to be interpreted in the same way that the term is often used by the FCC, as "provisional conclusions," provided to guide the parties in future presentation of evidence and proof.

2001 and that all Massachusetts density zones have seen growth in the number of competitive residential lines in 2001 (VZ Brief at 13-14).

b. CLECs

AT&T argues that when the Price Cap Order was implemented in 1995, the prevailing residential rates were adopted without determining whether they were sufficient to recover the cost of providing residential service (Exh. ATT-1, at 17). AT&T argues that if the prices for residential services suggested by Verizon are below the forward-looking, efficient cost of providing residential local exchange services, then adoption of the Verizon proposal will deter local exchange competition in the residential market because entry at below cost market prices would be prohibitive (id.). AT&T argues that the Department simply cannot evaluate the residential pricing components of Verizon's proposal without knowing whether the residential local exchange rates are free of subsidies (id. at 18). AT&T argues that business and residential services compete in different markets, but Verizon confusingly uses evidence of residential lines lost to competition in support of Verizon's proposal to deregulate its business services (Exh. ATT-2, at 7). Network Plus argues that Verizon is proposing caps and other restrictions on residential services because market forces are not strong enough in the residential market to keep Verizon from raising those rates to increase profits (Exh. NP-1, at 8-9).

c. Attorney General

The Attorney General argues that the Department must conduct a separate review of the Massachusetts residential market using the three-pronged test for sufficient competition (i.e., market share, supply elasticity, and demand elasticity) in order to determine whether actual competition exists such that competitors will exert enough pricing pressure to ensure just and reasonable prices (AG Brief at 8). The Attorney General argues that the record in this case indicates that Verizon has not shown sufficient justification to depart from a traditional cost-of-service or indexed price cap regulation method for services in the residential markets (id. at 10). The Attorney General states that Verizon retains 91.7% of the total residential market, and that this is too large a market share to allow Verizon to have pricing flexibility, because Verizon will be able to withstand competitive pressures (id. at 10-14). The Attorney General further characterizes residential competition in Massachusetts as "virtually non-existent" (AG Reply Brief at 2).

The Attorney General warns that under Verizon's proposal, Verizon could use revenues from its noncompetitive residential segment to cross subsidize its business segments (Tr. 1, at 111). The Attorney General argues that both supply and demand elasticities are low for the residential as well as the business market (AG Brief at 14-19). Verizon has made no attempt, argues the Attorney General, to distinguish between the residential and business markets in its analysis, and without these separate market analyses, Verizon has failed to meet the Department's initial requirement to delineate the appropriate markets at issue (AG Reply Brief at 2). The Attorney General argues that these factors indicate that Verizon should not be granted pricing flexibility in either the business or residential markets (AG Brief at 10).

3. Analysis and Findings

Verizon has not sought market-based pricing flexibility for its residential services in Massachusetts. Therefore, Verizon was not required to make a showing of "sufficient competition" as was necessary with Verizon's business services, and, thus, the Department disagrees with the Attorney General's conclusion that Verizon's proposal must be denied for failure to meet this standard in Verizon's residential market. The question is, then, without requiring a showing of sufficient competition, what form of Department regulation would (1) ensure just and reasonable rates for residential services; (2) be consistent with our precedent; (3) promote more competition for residential services; and (4) be compatible with our treatment of Verizon's business services?

The Department offers the following direction to Verizon and other parties who seek to file, or comment on, proposed plans for regulatory treatment of Verizon's residential services in Phase II of this proceeding. For several reasons, the Department finds that it is not feasible or desirable to institute cost-of-service regulation for only one set of Verizon customers. First, joint and common costs are shared between business and residential services, and allocation of these costs between residential and business customers might be unacceptably arbitrary. Second, cost-of-service regulation actually facilitates the ability of a regulated company to cross-subsidize competitive services with revenues from regulated services. In the Price Cap Order, the Department noted that alternative regulation, such as the price cap plan approved in that Order, is particularly well-suited to an increasingly competitive market characterized by a greater level of investment risk and technological convergence, such as the Massachusetts telecommunications market, because a well-designed plan insulates ratepayers from investment risk and subsidization of new ventures. D.P.U. 94-50, at 115.

Since the issuance of the IntraLATA Competition Order in 1985, the Department has approved pricing flexibility for most carriers in Massachusetts and has allowed all non-dominant carriers to employ market-based pricing for business and residential services. See June 21 Interlocutory Order at 15. In addition, since the Price Cap Order, the Department has approved alternative regulation plans for other utilities. See e.g., Berkshire Gas Company, D.T.E. 01-56 (2002); Boston Gas Company, D.P.U. 96-50 (Phase I) (1996); Boston Gas Company, D.P.U. 96-50-C (1997). Therefore, consistent with our precedent, the Department finds that some form of alternative regulation (e.g., rate freeze, price cap, revenue cap, or some combination of these) may be appropriate for Verizon's residential services and would not be inconsistent with precedent.

Concerning Verizon's basic residential rates, the Department offers the following observations. Because historic evidence has shown that residential rates are likely below their efficient levels (see New England Telephone and Telegraph Co., D.P.U. 89-300 (1990), and the "rate rebalancing" series of Orders[61]), an "inflation minus productivity" price cap for Verizon's basic residential services may not be the best mechanism for regulating basic rates. In addition, an "inflation minus productivity" price cap is designed to control the aggregate prices and earnings of a regulated company – not to determine just and reasonable prices for

61 New England Telephone and Telegraph Co., D.P.U. 91-30 (1991); New England Telephone and Telegraph Co., D.P.U. 92-100 (1992); New England Telephone and Telegraph Co., D.P.U. 93-125 (1994).

any particular rate element. The challenge for the Department is to determine a regulatory framework for assessing whether rates for specific services are just and reasonable.

As noted earlier, "while simulation of the results of a competitive market is a principle goal of regulation, the Department has previously found that actual competitive telecommunications markets are preferable to regulation as a surrogate for competition." Price Cap Order, D.P.U. 94-50, at 105 (1995). Thus, we can look to principles of competitive pricing for standards to judge whether regulated prices for specific services are just and reasonable. In competitive markets for telephone services, efficient market prices are based on incremental cost plus a mark-up for joint and common costs, based on Ramsey pricing principles. See id. at 249 n.144. Pursuant to Ramsey pricing principles, joint and common costs are recovered from services in inverse proportion to the demand elasticity of particular services. In this way, demand for services is as close as possible to the level of demand under pure incremental cost-based prices. However, it is impractical for regulators to determine demand elasticity (and, thus, efficient mark-ups) for any specific service. We do know that the range of prices that could prevail in an efficient market starts at a floor of incremental cost (no recovery of joint and common costs) and ends with a ceiling of stand-alone cost (incremental cost plus all of the firm's joint and common costs).[62] Because any price within this range could

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[62] See William J. Baumol and J. Gregory Sidak, Toward Competition in Local Telephony 77-78 (1994):

> The stand-alone cost [SAC] of product X is the cost that would be incurred by an efficient entrant if it were to produce X alone. That cost includes the required return to capital. Thus, by definition, any price of X that exceeds SAC_x would bring entrants flocking into the

(continued…)

prevail in an efficient, competitive market, any price within this range must perforce be just and reasonable.

Therefore, for basic residential services, we tentatively conclude that we should allow pricing flexibility within a range encompassing a floor of incremental cost and a ceiling of stand-alone cost. In order to promote our ratemaking goal of continuity however, we tentatively conclude that any price increases for residential services should be limited to five percent per year, which is less than the percentage price increases approved by the Department

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[62](…continued)

> arena if that market were perfectly contestable, because such a price would yield more than the cost of capital required to produce X. But any price that is an iota lower than SAC_x will be unprofitable for entrants, and it can therefore persist in a perfectly contestable market. It follows that stand-alone cost is the appropriate ceiling for price in a market regulated in accord with the competitive-market model.

See also, Alfred E. Kahn, The Economics of Regulation: Principles and Institutions Vol. II 222 (1995) ("The correct economic answer is that no class of customers should be required to pay more than the total cost of serving it alone"); William J. Baumol, "Maximum and Minimum Pricing Principles for Residual Regulation," 5 E. Econ. J. 245 (January/April 1979):

> One is therefore led to seek a permissible range within which management can exercise its judgment in setting price, but beyond which it will not be permitted to go in markets in which competition is ineffective. . . . What then can one propose as an appropriate upper bound on price? The one criterion which seems to have been suggested rests upon Faulhaber's concept of stand-alone cost. . . . [I]ts justification rests primarily (but not exclusively) on an equity principle – the view that it is unfair to extract more from a customer group than it would cost that group to serve itself.

See also, James C. Bonbright, Albert L. Danielson, and David R. Kamerschen, Principles of Public Utility Rates 618 (1988) ("Price ceilings are imposed usually to prevent the exercise of monopoly power. . . . The price ceilings could be set at some reasonable surrogate for the stand-alone cost of the service").

in the rate-rebalancing process started with D.P.U. 89-300, at 83 (1990),[63] and is roughly comparable to the historic annual change in the Consumer Price Index.

In order to ensure that the rates at which Verizon's basic residential services facilitate efficient facilities-based and UNE-based competition for those services, the Department will undertake, after the Phase II filing, a further investigation to compare UNE rates to Verizon's residential retail rates. If we conclude that retail rates are below UNE costs, and, thus, impede efficient competition for those services, we will take the appropriate steps to remedy the inefficiency. As discussed above (see Section V.B.4.a.(ii), above, for a discussion on access pricing), the Department is persuaded that switched access rates should be reduced to interstate levels, and special access rates should be reduced to UNE-based levels, with the revenue shortfall recovered from fixed charges for residential dial tone lines, and instructs Verizon to include such provisions within its proposal submitted in Phase II of this proceeding.[64] Verizon's filing in Phase II should include the pricing implications of the Department's finding that switched and special access service prices should be lowered, but it does not have to include a calculation of a price floor or price ceiling for basic residential services. That calculation will be performed after issuance of the Department's order in D.T.E. 01-20.[65]

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63 See also D.P.U. 91-30, at 61 (1991); D.P.U. 92-100, at 19 (1992); D.P.U. 93-125, at 20 (1994).

64 In addition to access pricing reform, the Department will also investigate and evaluate proposals for regulating Verizon's service quality in Phase II.

65 The Department will require Verizon to calculate price floors and ceilings for basic residential services on both a state-wide and density zone basis, in order to determine whether to allow geographic deaveraging for residential rates.

Regarding Verizon's non-basic residential services, the Department has historically differentiated its treatment of these services from Verizon's basic services. Since our first rate rebalancing order, Verizon's non-basic services have not been cost justified. See D.P.U. 89-300 (1990); D.P.U. 92-100, at 58 (1992) (table classifying NET's services as basic monopoly, basic competitive, auxiliary monopoly, and auxiliary competitive; and indicating the differing regulatory treatment for each classification). Non-basic services are considered to be a luxury, so the Department has allowed them to be priced based on market conditions and revenue-maximization. While the Department has not imposed upon Verizon's residential services a test for "sufficient competition" such as we have imposed on Verizon's business services, the Department can conclude from the record in this proceeding that there is existing competition for Verizon's residential services, and that competition for these services is growing (RR-DTE-2A; Exh. VZ-3A, Att. 1; VZ Brief at 13-15, Tables 1-5). There is no doubt that there is more competition for residential services now than when the Department first developed its flexible regulatory framework in 1985. Therefore, the Department determines that Verizon should be accorded, at a minimum, the same level of flexibility as it currently has with regard to its non-basic residential services.

VI. PHASE II

Consistent with our determination in our interlocutory Order on scope (see June 21 Interlocutory Order at 17-18), now that we have concluded our investigation into the sufficiency of competition for the services for which Verizon seeks pricing flexibility, the Department will begin Phase II of this proceeding. In Phase II, we will investigate and ultimately adopt a plan for regulatory treatment of Verizon's services that is consistent with the Department's findings in Phase I.

The Department requires Verizon to file a plan for regulatory treatment of its retail services that is consistent with the requirements set forth in this Order. Specifically, we expect Verizon's filing to include the following:

- A description of a proposal for regulating basic residential services. If Verizon's proposal is not consistent with the Department's tentative conclusions in this Order, the filing must include thorough and detailed explanation and justification for the departure.
- A calculation of new prices for switched and special access services, and the new residential dial-tone price that would result from revenue-neutral reductions in access prices. Verizon should include a calculation of revenue-neutrality using the demand-stimulation assumptions used in Exh. DTE-VZ-1-10.[66]
- A description of the Service Quality plan and associated penalties.
- A description of filing requirements for price decreases for business services.

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66 Verizon should also include its proposed elimination of charges for residential Touch Tone service.

- Identification of any services that are primarily provided to other carriers as wholesale services, and a proposal for a pricing regime based on UNE requirements for any such services.

The Department and the parties must receive Verizon's plan by June 5, 2002. Comments on Verizon's plan will be due June 21, 2002, and reply comments will be due July 9, 2002.

VII. ORDER

After due notice, hearing, and consideration, it is

ORDERED: That the request of Verizon New England, Inc. d/b/a Verizon Massachusetts for pricing flexibility of its Massachusetts intrastate retail telecommunications services is hereby DENIED in part, and APPROVED in part as described herein; and it is

FURTHER ORDERED: That Verizon New England, Inc. d/b/a Verizon Massachusetts must submit a regulatory plan for Verizon's retail intrastate telecommunications services that is consistent with the requirements set forth above, and that this plan shall be filed with the Department by June 5, 2002; and it is

FURTHER ORDERED: That the Hearing Officer Ruling, dated September 7, 2001, is hereby upheld in part and modified in part, consistent with the findings above; and it is

FURTHER ORDERED: That Verizon New England, Inc. d/b/a Verizon Massachusetts shall comply with all directives contained herein.

By Order of the Department,

___________/s/______________________
James Connelly, Chairman

___________/s/______________________
W. Robert Keating, Commissioner

___________/s/______________________
Paul B. Vasington, Commissioner

___________/s/______________________
Eugene J. Sullivan, Jr., Commissioner

___________/s/______________________
Deirdre K. Manning, Commissioner

Appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part.

Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. (Sec. 5, Chapter 25, G.L. Ter. Ed., as most recently amended by Chapter 485 of the Acts of 1971).